THE HISTORY AND ARCHAEOLOGY OF PASTORALIST AND HUNTER-GATHERER SETTLEMENT IN THE NORTH-WESTERN CAPE, SOUTH AFRICA.

by
LITA ETHEL WEBLEY

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Lita Webley
Albany Museum, Somerset Street, Grahamstown 6140.
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ABSTRACT

Investigations in the archaeologically unexplored region of Namaqualand show that it was unoccupied for much of the terminal Pleistocene and early Holocene. Marginally more favourable climatic conditions circa 2000 BP encouraged re-occupation of the region. It would appear that Khoe-speaking hunter-gatherers with livestock and pottery first entered Namaqualand along the Orange River before moving southward along the Atlantic coast. Both sheep and pottery are present at /Ai tomas in the Richtersveld and Spoeg River Cave on the coast, some 1900 years ago. This is strong evidence for a western route of Khoekhoen dispersal into southern Africa and invalidates one of the hypotheses proposed by Elphick in 1972. Domestic stock was initially only a minor addition to the economy and these early inhabitants of the region continued utilising wild plant foods and game, slaughtering their domestic stock only infrequently.

It is proposed that hunter-gatherer society may undergo the structural changes necessary to become pastoralists and that there is evidence for this in the archaeological record from Namaqualand during the period 1900 to 1300 BP. The historical and ethnographic records relating to the Little Namaqua Khoekhoen indicates that gender conflict structured much of the lives of the historical population and it is postulated that the pre-colonial period was also characterised by changing gender relations. Central to this thesis is a consideration of the active role of material culture in negotiating relations between various interest groups within a society as well as structuring relations between 'ethnic' groups. Certain material culture items are identified which were used to negotiate and structure gender relations. The archaeological material from Namaqualand are therefore analysed in order to determine changing social relations through time.

It is concluded that ethnic distinctions between pastoralist groups and hunter-gatherers in Namaqualand became more stressed with the arrival of the Dutch as a consequence of increasing competition for resources. The collapse of Namaqua Khoekhoen society was brought about as a result of trading excess stock for luxury items rather than in establishing stock associations. This thesis proposes that material culture from archaeological excavations be analysed for evidence of the structuring of within-group relations and that material cultural changes dating to within the last 2000 years should not automatically be ascribed to the presence of two 'ethnic' groups.

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INTRODUCTION

> 'Beginning. Were two brothers, the elder with poor sight. The Bushman or younger one found a hole in the ground from which many cattle came forth daily. He told the Namacqua and they plugged it with bushes so that the calves remained inside. At nightfall the cows and bulls returned and they made a fire. Then the younger one said "all the fiery-eyed cattle are mine". The eldest said "the black eyes are mine". In the morning the Namacqua said "take your fiery eyes", but, since it was then daytime, the "fire" had deceived him. He walked away and from that time became Bushman, the Namacqua retaining the cattle.'

The above 'origin myth' related to Robert Gordon in 1779 (Smith & Pheiffer 1992) by Kasaap, a Little Namaqua, indicates their beliefs regarding the origin of pastoralism and the relationship between the Little Namaqua Khoekhoen and the 'Bushmen' (hunter-gatherer or San) peoples. A later, and more complete version of this myth, is presented below on page 8 while Solomon (1989) has presented a similar hunter-gatherer narrative in the introduction to her thesis. The striking parallels between these three versions strongly suggest that this was a belief held in common amongst the Khoisan groups of the north-western and northern Cape. The tale in its various forms is important because it suggests the Little Namaqua Khoekhoen believed that they and hunter-gatherer groups shared a common ancestry. It is this issue which forms the focus of this thesis.

This thesis is concerned with documenting prehistoric and historical processes of social change among the indigenous peoples of Namaqualand with the aim of constructing a history for the region, spanning the last 2000 years. More specifically, I attempt to link the history of the last 300 years in Namaqualand with the pre-colonial past as explicated from the archaeological record.

I also address the issue of separate Khoekhoen and hunter-gatherer 'ethnic identities' since documenting the archaeological history of Namaqualand of necessity entails linking cultural material to social groupings. In the latter half of this chapter I review current linguistic, ethnographic, historical and archaeological data pertaining to the Khoekhoen and hunter-gatherer groups and the interpretations that have been placed

upon them. Two schools of thought have emerged with respect to the interpretation of this material. One emphasises economic similarities between Khoekhoen and hunter-gatherers while the other cites social and archaeological differences. In my review of the literature I present some of the issues raised with respect to the relationship between groups at the Cape during the last 2000 years. I believe that an impasse has been reached because the two sides in the debate have failed to analyse the social organisation and structure of Khoekhoen society as it is only "through the internal organisation of social relations that strategies of economic competition are chosen and it is in terms of the within-group organisation that, ultimately, the between-group relations must be understood and assessed" (Hodder 1982a:187). In other words, we will only be able to understand the nature of the relations *between* the Khoekhoen and hunter-gatherers once we have come to grips with the internal configuration of each society. Extensive ethnographic research has already been undertaken on the social organisation of various hunter-gatherer groups and because it is necessary to contrast the two I devote considerable attention to the social organisation of the Little Namaqua in chapter 2.

I argue that historical and ethnographic data as opposed to the archaeological record can provide an understanding of the past which neither set could have provided alone. Assertions that the use of ethnographic data provides a static view of social groups can only be justified if the ethnographic data are presented in a fashion which excises it from its historical context. By delineating the political, social and economic processes which resulted in the impoverished condition of nineteenth century Namaqua I attempt to accord the people of the region a dynamic history. I do not reject the use of ethnographic data, since both it and the historical records are no different from archaeological data: they are all artefacts of the past. I therefore draw on all three sources in my construction of Namaqua history. The first two 'artefact sets' are ideological products which have been used in the construction of the primitive 'other' as opposed to European norms and values (Wilmsen 1989), while I concede that the third category, archaeological artefacts, is analysed within my own ideological framework. Indeed, Legassick (1979) has suggested that our (South African) obsession with attempting to distinguish Khoekhoen from hunter-gatherers in the historical and prehistoric past is rooted in the apartheid ideology, which emphasises differences rather

than similarities. However, I believe this to be a facile argument which ignores current trends in archaeology toward recognising the uniqueness of social groupings and examining particular histories rather than attempting to construct broad law-like generalizations of culture change.

This thesis plays down (while not completely ignoring) the significance of environmental contraints in circumscribing herder versus hunter-gatherer occupation in Namaqualand. Small-scale environmental changes during the last 2000 years appear to have taken place but I do not believe that the social form of pastoral society is laid down by the "technical business of herding a given species of domestic animal in a given environment" (Ingold 1984:4). Ingold (1984:3) adds "the rationale for the exploitation of environmental resources is embodied in the social relations that govern their appropriation, and therefore an understanding of these relations must constitute a starting point for the analysis of economic behaviour". In this thesis I therefore accord a central role to social relations and the historical process.

In my overview of the history of Namaqualand, presented in chapter 2 and in Appendix 2, I emphasise the changing relations between the Little Namaqua and the 'soaqua' peoples (by all accounts hunter-gatherer groups) as well as the fluidity of group membership and composition during the colonial period. After sketching the social structure of Little Namaqua society based on ethnographic data, I consider the role of material culture in both structuring and symbolising within-group relations. I pay particular attention to the changing nature of gender relations in Namaqua society. The decision to focus on gender was not a conscious attempt to ride the fashionable bandwagon of gender relations currently enjoying popularity in archaeological studies in South Africa. However, as I examined the ethnographic and historical literature relating to the Little Namaqua I became increasingly aware of the fact that their women exerted considerably more authority than in other African societies. It will become apparent in my overview in chapter 2 that the position of women in Namaqua society is not an artificial construction but a very real phenomenon which structured the relations of their society. I argue that the relations of production in Namaqua society were clearly structured along gender lines, with differential control over the means of production resulting in significant tensions within the society. If one examines the

current position of !Kung (or Zhu) women it would appear that the transformation of hunter-gatherer society to that embracing pastoralism has been accompanied by a significant decrease in the status of women. I suggest that this was *not* the case among the hunter-gatherers turned pastoralists in the north-western Cape. I also emphasise the importance of surplus stock in establishing stock associations and thereby reproducing the entire pastoral social formation. When herders started exchanging surplus stock for tangible items such as jewellery rather than in maintaining their stock associations they set the seal on the collapse of their autonomy.

This thesis follows recent trends toward placing objects within their contemporary setting. I emphasise that items of material culture (such as the bambus, ceramic vessels, tortoise-shell containers, etc.) can provide us with information on past social formations only if they are considered within an appropriate historical context. In chapter 3 I consider the role of material culture in structuring within-group boundaries. This is because I believe that material culture does not merely reflect, "it transforms relationships within a particular framework of beliefs, concepts and attitudes" (Hodder 1982a:207). It is the manner in which internal tensions are manifest in material culture that distinguishes one society from another. In other words, "the between-tribe distinctions are *maintained* through material culture as part of within-group tensions" (Hodder 1982a:76; my emphasis).

In chapter 4 I consider the concept of ethnicity, arguing that identity-conscious social groups emerge, over a period, as a consequence of competition over scarce resources and are maintained through the manipulation of certain items of material culture. If Khoekhoen and hunter-gatherer groups did define themselves with respect to one another then we may hypothesise that this would have been reflected in our archaeological material.

The results of my archaeological investigations in Namaqualand are discussed in chapters 5 and 6. The ecological setting of each site is briefly sketched and I indicate how environmental data as well as ethnographic observations suggest that seasonal variations in pasture and the availability of water would have constrained the movements of groups with domestic stock. I discuss the results of excavations at Spoeg

River, Bethelsklip, Keurbos and Modderfontein in chapter 5 and /Ai tomas and Frummel Bakkies in chapter 6.

The archaeological data presented in chapters 5 and 6 are examined in chapter 7 with the aim of tracing those processes which could have been responsible for the specific form of the social formation taken by the Little Namaqua during the 17th and 18th century period. Various aspects of the archaeological record are highlighted and analysed in order to determine whether they relate to the two distinct cultural groupings observed in Namaqualand during the historical period. An alternative explanation would see material culture changes in Namaqualand ascribed to the changing status of the sexes (and possibly age-groups) within only one form of social organisation such as the Khoekhoen or hunter-gatherers.

Finally, I argue in chapter 8 that my examination of the archaeology of the past 2000 years in the north-western Cape suggests that previous interpretations of the archaeological record from other parts of southern Africa spanning the same period have been too simplistic. Material culture boundaries or discontinuities do not simply reflect 'ethnic' groups, as I have discussed above. The issue is a good deal more complex and the challenge facing archaeologists concerned with this period is that of tracing 'ethnic relationships' through time as well as attempting to isolate changing social structures within groups through time. In chapter 8 I sketch a scenario for the occupation of Namaqualand which provides new insights into pastoralist archaeology in southern Africa.

The terminology used in this thesis

During my literature review I grappled with the problem of which terms to use when referring to various social groupings. I was concerned to use self-referents when discussing the colonial period but, as Wilson (1986) and Penn (1987) have illustrated, this in itself is no easy task. Is there any evidence for self-referents with respect to the Khoekhoen or hunter-gatherer groups? The Khoe-speaking pastoralists, who for simplicity's sake I will be calling Khoekhoen (Nienaber 1990), are reported to have used a number of collective terms. Only the Namaqua are ever reported to have

referred to themselves as Khoikhoi; the Cape Khoi used Quena, etc., as a generic term (Wilson 1986:252). Self-referents were more commonly applied to individual tribes e.g., the Namaqua as opposed to the Guriqua, etc. While Elphick (1985:xxi) defines "a Khoikhoi to be *any person accepted as a full* (i.e. not a subordinate) *member of a Khoikhoi community*. A Khoikhoi community was *one where a dialect of the Khoikhoi language was spoken and where pastoralism was the preferred mode of economic life*", Wilson (1986:253) continues to maintain that there is "no documentary evidence from the historical period for the common use of 'Khoikhoi' (or its cognates) as a generic by the people themselves". According to Nienaber (1990) current orthography dictates that the term 'Khoekhoen' should be employed; this term is therefore adopted in this thesis. Following Barnard (1979, 1987, 1988), Borland (1986), Vossen (1984) and Westphal (1980) 'Khoe-speakers' would include not only the Khoekhoen but also "the Damara, the Bushmen of the Central Kalahari and Okavango and the Hai-//om Bushmen" of Namibia (Barnard 1987:189). It is a term which, therefore, encompasses both pastoralist and hunter-gatherer modes of subsistence.

There are numerous references to Soaqua/Sonqua/Ubiqua in the early records (Parkington 1977; Wilson 1986) but these appear to be terms applied by outsiders. There is *no* evidence for the use of self-referents among these various hunter-gatherer groups. Elphick (1977) has suggested that the Nama term 'San' had 'wide reference', being applied to hunters and small-scale pastoral groups. Parkington (1984:158) interprets it as follows, "Soaqua seems not to be a word of equivalent status to Namaqua [Nama]", but instead describes a particular lifestyle rather than being the name of a specific community. Elphick (1985:24) asserts that Sonqua/Ubiqua do not refer to specific bands but to a *category* of people spread all over South Africa. The 'Soaqua' were not perceived of as an ethnic group but as an undesirable social class. With respect to the pre-colonial hunters, we should avoid according them a generic ethnic term such as San or Bushmen; in this thesis I use 'soaqua' and 'Bosjesman' only when it occurs as such in the historical records.

It has become fashionable to use 'forager' when referring to hunter-gatherers, but I follow Ingold in considering it to be a term describing extractive behaviour in the animal kingdom and prefer to use hunting and gathering, both of which imply

"subjective intentionality brought to bear on the procurement process" (Ingold 1986:79). Thus, for the purposes of this paper, I will continue using the traditional term hunter-gatherer when referring to pre-2000 BP groups as well as post-2000 BP individuals whose identity is not specified in the historical records. Following Parkington (1984) I use 'soaqua' only when the historical records indicate this.

Liberal historians insist that in our research into the pre-colonial peoples of South Africa we should separate language and mode of production, from "other cultural practices, or from genealogies of descent" (Legassick 1979:251). Archaeologists are not ignorant of the fact that the labels 'Bosjesman', 'Hottentot' and 'San' are all external impositions, terms applied by outsiders to the indigenous peoples of the Cape and not terms they applied to themselves. Various researchers have pointed out there is no clear one-to-one correspondence between the label applied to a specific group, its language, economy or its material culture. Archaeologists have therefore in the past attempted to avoid conflating these categories although there has been a move in recent years toward linking a particular set of cultural traits with a certain social group. These issues are discussed in detail below.

REVIEWING KHOEKHOEN ORIGINS; DISPERSAL AND A SEPARATE 'ETHNIC' IDENTITY

This chapter commenced with a myth recounting the origins of the Khoekhoen or, more specifically, the Little Namaqua Khoekhoen. The ambiguity in the latter portion of the tale relating to "eyes" and "fire" suggests that Gordon did not fully comprehend Kasaap's account or that Kasaap himself was unclear as to its ending. A more complete version of the same tale was collected by Kronlein, who worked as a missionary among the Great Namaqua during the mid-nineteenth century:

> 'In the beginning there were two. One was blind, the other was always hunting. This hunter found at last a hole in the earth, from which game proceeded and killed the young. The blind man, feeling and smelling them, said, "They are not game, but cattle".
> The blind man afterwards recovered his sight, and going with the hunter to this hole, saw that they were cows with their calves. He then quickly built a kraal (fence made of thorns) round them, and anointed himself, just as Hottentots (in their native state) are still wont to do.

> When the other, who now with great trouble had to seek his game, came and saw this, he wanted to anoint himself also. "Look here!" said the other, "you must throw the ointment into the fire, and afterwards use it". He followed this advice, and the flames flaring up into his face, burnt him most miserably; so that he was glad to make his escape. The other, however, called to him: "Here, take the kirri (a knobstick), and run to the hills, to hunt there for honey". Hence sprung the race of Bushmen' (Bleek 1864).

Archaeologists are generally in broad agreement on the following issues regarding Khoekhoen origins: Khoe-speaking hunter-gatherers in northern Botswana acquired stock from an as yet unidentified source before moving down into southern Africa some 2000 years ago (Fig.1). It was the descendants of these peoples (Khoekhoen) who were encountered by early seafarers along the southern African coastline during the sixteenth and seventeenth centuries. That the Khoekhoen originated in Botswana was deduced by Elphick (1977,1985) on the basis of linguistic material accumulated by Westphal (1963,1980). According to the latter, Dama, Cape Hottentot (which includes !ora or Korana and Griqua) as well as Tshu-Khwe all belong to the Khoe language family.

The linguistic evidence would apparently suggest that Khoe-speakers dispersed somewhere in the north-western Cape, dividing into two groups, Nama and proto-Cape Khoekhoen. More recently Westphal (1980) has stated "using a very superficial assessment of 49% common vocabulary between Tshu-Khwe and modern Nama, we can speculatively date (if we accept lexico-dating) the separation of these two Khoe dialects to greater than 3000 BP, perhaps to 4000 BP". The "Bush" languages in those areas (Namibia, Bostwana and South Africa) penetrated by the Khoe dispersal were (and still are) characterised by considerable heterogeneity and, according to both Elphick (1985:10) and Westphal (1963:256), cannot be said to form a compact linguistic community as does that of the Khoe-speaking peoples. It is important to emphasise that there is no one-to-one correspondence between language and economic activity: the majority of Khoe-speakers today, are in fact, hunter-gatherer peoples in Botswana. Only the Nama and Dama of Namibia are still Khoe-speaking pastoralists. Ehret, (1967) on the other hand, has argued that the separation between Khoekhoen and the Central Bush (San) languages took place around the Botswana-Angola border region approximately 2500 BP. More recently, Vossen (1984) has posited a separation of Khoe (Central San) languages from Khoekhoen (Nama) at a time coincident with the introduction of Early Iron Age pastoralism into the region, that is, about 2000 years ago.

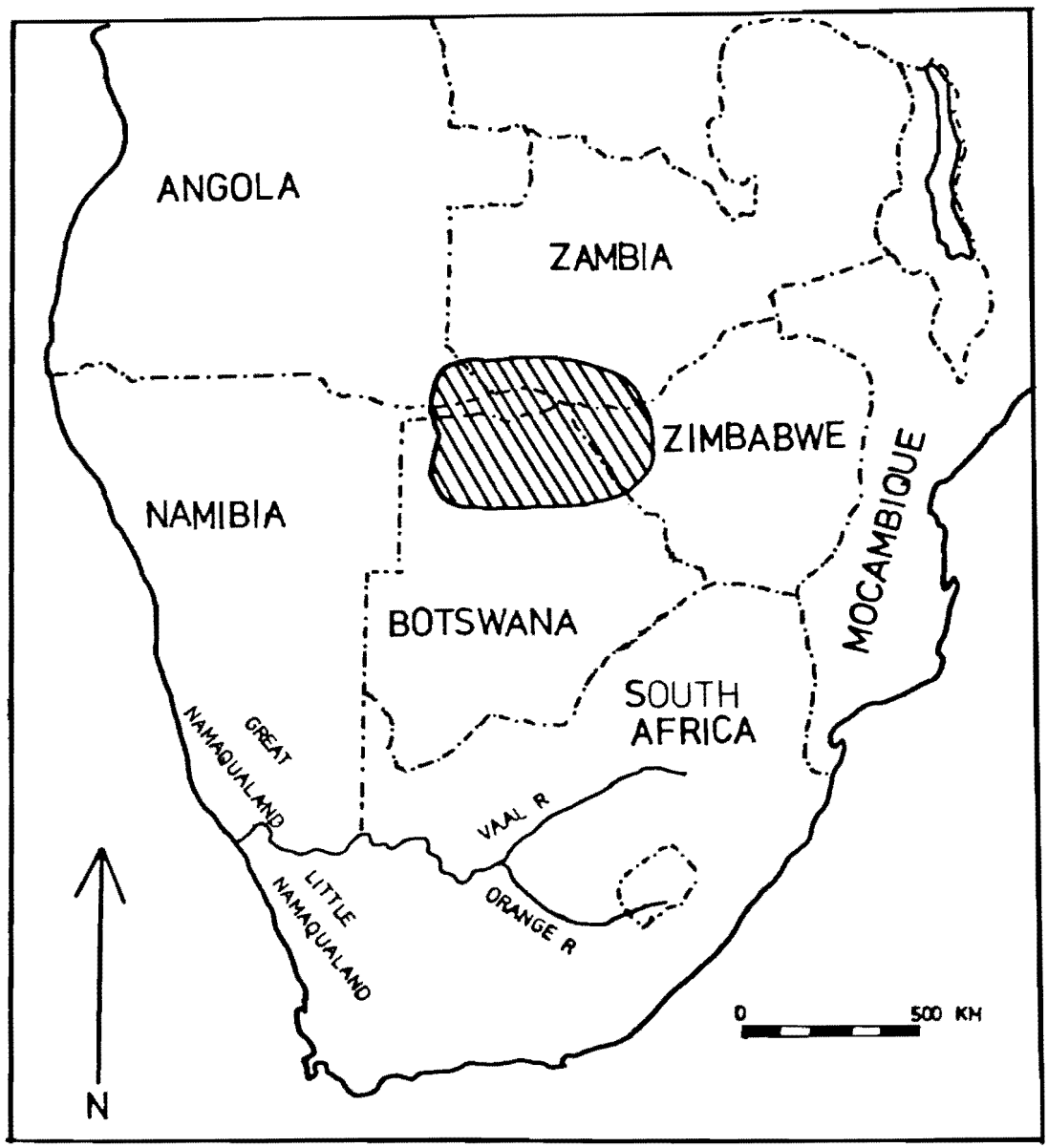

Fig. 1. Map indicating the countries of southern Africa referred to in the text, as well as the hypothetical centre of Khoe-speakers (after Westphal 1980).

In fact, several authors have postulated that the Early Iron Age peoples may have been the source of the livestock introduced by Khoe-speaking pastoralists. Most recently, Smith (1990a:5) has suggested that the source of the stock and pottery is likely to be "Bantu-speaking agro-pastoralists expanding into southern Africa some 2000 BP or earlier" and refers to the site of Salumano in western Zambia which has domestic cattle dated to 2400 BP. This view seems unlikely since "much of the basic pastoral vocabulary used by speakers of Southern Bantu languages is derived through a Khoisan intermediary" (Wilmsen 1989:65). The Nama (Khoe) name for cattle is *komas* or *gomas* (Borland 1986), which it shares with the other Khoe languages of north-central Botswana. The term for 'cattle' in many Bantu languages appears to have been borrowed from Khoe (Ehret 1967). Borland (1986) points out that, while the Southern Bantu speakers had cattle and an associated terminology when they came into contact with the Khoe-speakers, their terminology was displaced by that of the Khoe. If Khoe speakers in Botswana had terms for cow, sheep and milk *before* the arrival of the Southern Bantu in the region, then it may be feasible to postulate that they may also have been incipient herders for several hundred years before they moved into Namibia and South Africa. It is important to note however that while the term used for cattle by Khoe-speakers may resemble those of the Later Iron Age (Nguni peoples) this does not necessarily mean that these same terms were also used by the Early Iron Age peoples (Huffman 1990).

Both Vossen (1984) and Kohler (cited by Denbow &Wilmsen 1986) believe that Khoe-speaking hunter-gatherers must have been familiar with the concept of pastoralism for a very long time. The linguistic data, tentative though they may be, at present suggests that Khoe-speakers in Zimbabwe or Botswana had acquired stock before they came into contact with the Early Iron Age communities. We should look further afield for the origins of their livestock and pottery, almost certainly to the Stone Age pastoralists of East Africa. Robertshaw (1978,1990) suggests that the source of both the livestock and related terminology may have been the Central Sudanic speakers (see also Klein 1984).

Barnard (1980,1987,1988) has approached the issue of Khoekhoen origins from the perspective of kinship rather than language and has obtained some interesting results.

After an exhaustive study of Khoe-speakers (i.e. the Khoekhoen, the Damara, the Hai-//om Bushmen of Etosha pan, the Bushmen of the central Kalahari and Okavango) he concluded that they all shared similar kinship structures despite "economic, cultural, linguistic and 'racial' boundaries" (1987:189). These structures are discussed in greater detail in chapter 2; however, it is pertinent to mention here that those aspects of kinship and social structure "which are more easily affected by changes in the subsistence pattern are, in a relative sense, part of the surface structure, and those which are not so easily affected are part of the deep structure of any given kinship system" (Barnard 1988:36). The surface structure to which he refers are the patrilineal organisation associated with a cattle and sheep herding economy exhibited by the Khoekhoen; the Khoe-speaking hunter-gatherers, on the other hand, have a kindred-based or bilateral band organisation. The deep structure common to all the Khoe (Central Khoisan) kinship systems includes "bilateral name relations, consanguineal-affinal term transpositions, reciprocal grandrelation and sibling-cohort terms, extension of relationship terms through namesake equivalence, and marriage to specific cousin categories" (Wilmsen 1989:188). These underlying structures are less liable to change than the superficial structures discussed above and the fact that the Khoekhoen shared these deeper structures with Khoe-speaking hunter-gatherers in Botswana confirms that they shared a common origin.

Barnard (1987,1988) has suggested that the early Khoe-speaking Bushmen all had livestock but that they abandoned their herding life-style when they migrated to the eastern or central Kalahari. "Environmental conditions necessitated small, bilateral band organisation. Since kin category was no longer associated with local organisation, bands being bilateral rather than patrilineal, the local groups remained or became agamous" (Barnard 1988:39). Kinship analysis therefore substantiates the linguistic data, namely that "Khoekhoe and Khoe Bushmen social organisation share a common origin and common structures, in spite of economic differences" (Barnard 1988:45). In other words, kinship research would also appear to militate against the diffusion of cultural traits postulated by Kinahan (1989).

Routes of dispersal: the linguistic evidence

Models of the routes taken by the early Khoe-speakers into South Africa are based on the affinities of three languages, namely Korana, Griqua and Nama. Two of these languages are extinct. Ehret (1982:159) has suggested that Namaqua and Korana are dialects of a language *distinct* from, but closely akin to, the language of the Cape Khoekhoen. A part of Elphick's model of Khoekhoen dispersal is based on this presupposition. His ancestral Khoekhoen moved with domestic stock southward from Botswana to somewhere in the northern Cape (possibly around the Orange River). Here they split into a proto-Orange River group and a 'proto-Cape Khoi' group. The former later divided into the Korana (who continued living near the confluence of the Orange and Vaal Rivers) while the Namaqua moved westward toward the Atlantic Ocean before dividing into two groups and settling north in Namibia and south in Namaqualand. The Cape Khoekhoen in the meanwhile travelled southward to the eastern Cape coast from whence they moved along the coastal margins into the western Cape (Elphick 1985).

This model of pastoralist dispersal has been opposed in recent years by Deacon *et al.* (1978) and Robertshaw (1978) who follow Cooke (1965) in tracing a route from Zimbabwe, through Botswana, into northern Namibia and then southward into the Cape Province. This model more adequately fits the archaeological data (presented below) and is still in broad agreement with the interpretation offered by Elphick (1977,1985) for the origins of the herding peoples themselves. Nienaber (1989), however, in his review of the origins of the Korana and their relationship with the Cape Khoekhoen and Namaqua, concludes that they are historically and liguistically closer to the former than the latter. He is of the opinion that the Korana in fact originated in the south-western Cape but moved to the Orange River in the late 17th century to escape European domination and assimilation. Similar assertions are made by Westphal (1963:251) on the basis of research by Theal (1964) and Maingard (1932). Nienaber (1989:669) claims that there is a close linguistic association between Cape Khoekhoen and Koranna, much closer than between Cape Khoekhoen and Nama, or between Koranna and Nama. It would appear, he concludes, that the Koranna and the western Cape Khoekhoen formed a bridge between the Namaqua and the eastern Cape Khoekhoen.

It is significant that Elphick, while relying heavily on Westphal's interpretation of 'Hottentot' languages, ignores his classification of the Koranna as part of 'Cape Hottentot', and uses Ehret's reconstructions instead. Since Westphal, Ehret and Nienaber were all dependent on limited published Griqua and Korana sources for their reconstructions of Cape Khoekhoen their divergent interpretations of the data are not surprising. Opinion is obviously divided on this issue and alternative predictions of Khoekhoen dispersal are clearly feasible. Despite their tenuous base, the linguistic reconstructions explicated above have been appropriated by archaeologists and historians alike to support their own particular theories. I believe that a great deal more research is still needed on the 'Bush' and 'Khoe' languages of Botswana, Namibia and Angola before definitive statements regarding centres of dispersal, dates of dispersal and directions of dispersal may be proposed for archaeological testing. Nevertheless, the linguistic evidence is clear on one issue: the Khoe-speaking pastoralists of the Cape Province encountered during the 17th century belonged to a different language family from the /Xam Bush-speakers of the central Orange River area. We have no linguistic information regarding the other, now extinct, Bush-speaking peoples who at one stage occupied the whole of South Africa. Elphick (1985:10) is of the opinion that the region was characterised by 'extraordinary linguistic diversity'. He suggests that it is possible that stock may have spread among hunter-gatherers in *advance* of the Khoe language and that these early herders may have become absorbed by a later influx of Khoekhoen. It is also conceivable, though perhaps not likely, that Khoe-speaking hunter-gatherers may have inhabited certain areas of South Africa prior to the arrival of Khoe-speaking pastoralists, which would have facilitated the spread of livestock and pottery. At any rate, linguistic research to date is definitely in favour of a movement of people into southern Africa. This is because migration theory is still a highly respectable explanatory device in the field of linguistics. The linguistic data presented above are at odds with models which postulate a diffusion of pastoral traits into southern Africa. The archaeological material recovered to date suggests a fairly rapid spread of both pottery and sheep throughout large areas of the Cape Province and Namibia which may be cited as further justification for looking toward a population movement. Migration theories do not enjoy much support among archaeologists, although frequently cited as both an *ad hoc* and a *post hoc* explanation for culture change.

The physical anthropological evidence

If we believe that livestock and pottery manufacturing abilities were introduced by the physical movement of people across the landscape then it is legitimate to question whether these peoples differed physically from the populations already resident in the region. Stereotypical descriptions of 'Hottentot' and 'Bushman' physical types abound in the historical literature, and human skeletal remains have not escaped early attempts at racial classifications. Morris (1986) has pointed out that the labels attached to human remains reflect the collector's preconceptions rather than reflecting the true 'ethnic' affiliation of the individual and has therefore questioned the accuracy of Hausman's identifications.

Hausman's (1984) exhaustive analysis of over 200 crania concluded that "the significant distance between the inland male hunter-gatherers and the inland herder males supports the traditional San-Khoi division" (Hausman 1984:265). There were, however, significant differences between inland and coastal populations, suggesting that coastal groups may have lived along the coast for large parts of the year. More important, however, is her conclusion that "the traditional San-Khoi distinction made for inland peoples may not apply to coastal inhabitants" (1984:266). She claims to have been able to distinguish between Khoekhoen and hunter-gatherer groups from the coast, confirming that there may have been "some population movement associated with the spread of pastoralism" (1984:268), but that "no major population succession took place on the coast with the arrival of pastoralism" (1984:268). It is important to mention here that few of the skeletons analysed by Hausman have been radiocarbon dated and this "ignores the possibility of changes through time in the genetic make-up of the peoples and their consequent biology" (Wilson 1990:51).

The the chemical analysis of over 70 skeletons from the southern and south-western Cape Province also indicates that "there are no grounds, from a stable carbon isotopic point of view, for dividing the post-2000 BP coastal population into two groups" (Sealy & Van der Merwe 1988:94).

Hausman has therefore suggested that pastoralism developed differently at the coast from the inland areas. "The abundance and flexibility of coastal resources may not have generated the competitive boundaries between herders and non-herders. Thus, forces that may have stimulated genetic differentiation among inland populations may not have occurred on the coast", says Hausman (1984:270). Cultural assimilation may therefore have taken place more easily at the coast. Hausman (1984:269) has suggested that the reason for this may be attributed to differences in Khoekhoen and hunter-gatherer marriage and kinship systems which "could have contributed to the biological differentiation of the groups". Khoekhoen preferences for cross-cousin marriages (as opposed to the Kalahari San hunter-gatherers who exhibit a 'low degree of endogamy') would have resulted in increased nucleation and the strengthening of social boundaries within groups, thereby contributing to the separation of Khoekhoen pastoralists from hunter-gatherers. "This separation would inhibit interbreeding between the groups and encourage genetic separation" (1984:270). More recently, Wilmsen (1989) has rejected this view, showing that in 78% of all Zhu marriages the partners came from within 60 km of their birthplace. This would indicate a significant degree of intermarriage among hunter-gatherer groups over a period, which, theoretically, should have further encouraged interbreeding and genetic separation.

Archaeological evidence for the migration of pastoralism

One of the implications of the linguistic 'evidence' reviewed above is that our earliest identifications of both domestic stock and pottery in Stone Age contexts should be recovered from a triangle lying over Botswana, Zimbabwe and possibly Zambia. While Walker (1983:89) has sheep/goat occurring together with LSA tools and Bambata Ware at Bambata Cave some 200 BC, very early dates for pastoralism have yet to be obtained in Botswana. Ceramic LSA assemblages in central and western Kalahari have been dated to 1,500 BP, in other words more or less contemporaneously with the establishment of the Early Iron Age in these same areas (Denbow 1986). There have been a number of reviews in the last two decades regarding the distribution of archaeological sites containing pottery and/or domestic stock (Robertshaw 1978;H.J. Deacon *et al.* 1978;J. Deacon 1984; Klein 1986; Kinahan 1989).

If one considers the list of radiocarbon dates associated with pottery, sheep and cattle provided by J. Deacon (1984) for southern Africa, and adds to this those sites excavated between 1984 and 1990, then it would appear that a marked increase in pottery-bearing sites occurs only after 500 BP. Only a third of pottery sites in the period 2000-500 BP contain sheep and the earliest dates for both are from sites in the southern and south-western Cape (Table 1). Attempts have been made to test Elphick's hypothesis, based on the distribution of sites with sheep, pottery and cattle and the evidence suggests, according to Robertshaw (1978) and Deacon *et al.* (1978), that the route followed the Cape west coast. Klein (1986:9), summarising the faunal evidence for sheep and cattle concludes that they may not have been introduced simultaneously and suggests that there may have been "multiple introductions of herding along different routes at different times" while J. Deacon (1984:275) takes a more pessimistic line: "the chances of tracing the routes taken by the hypothetical first herders are extremely slim".

Domestic Faunal Remains

Reviewing the archaeological evidence for herding among 'Stone Age' peoples in Southern Africa, Maggs & Whitelaw (1991:5) conclude that "it is very difficult to classify the archaeological residue on a site according to a specific subsistence mode such as pastoralism. The mere presence of domestic animal bones is insufficient. What is more important is the age profile of the sample at time of butchery". The submission that the age profile of domestic faunal remains allows us to distinguish herders from hunter-gatherers who were merely butchering stock they had raided, is well entrenched in the South African archaeological literature.

Die Kelders (Schweitzer 1974,1979), Boomplaas (Von den Driesch & Deacon 1985) and Kasteelberg A & B (Klein & Cruz-Uribe 1989) contain the most compelling evidence for the herding of livestock within a 'stone age' context in South Africa. Of the thirty sheep individuals recovered from Die Kelders at least 18 were less than eighteen months of age (Schweitzer 1974, 1979). At least 80% of the 44 sheep individuals recovered from Boomplaas are reported to have been juveniles (less than eighteen months of age) (Von den Driesch & Deacon 1985). Moreover, the sheep remains were found in a dense accumulation of calcined dung which would appear to suggest that the cave featured as a kraal as well as a living area. At least 51 individual

Table 1. Selected sites in the Cape Province and Namibia with evidence of domestic stock and/or pottery in a Stone Age context. Dates marked with an asterisk refer to only pottery.

Site Name	Radiocarbon years BP	Lab. no.	Sources
Falls Rock Shelter	1880±45*	Pta-2927	Kinahan 1989
	2040±50*	Pta-2930	
	2100±50*	Pta-2927	
Snake Rock	1840±50*	Pta-2886	Kinahan 1989
Eros Shelter	1745±45*	GrN-5297	Vogel 1970
Mirabib	1550±50	Pta-1535	Sandelowsky et. al 1979
Apollo 11 Rockshelter	1460±55*	KN-1 846	Freundlich et al. 1980
	1670±55*	KN-1 870	
Little Witkrans	1490±40*	Pta-2447	Humphreys & Thackeray 1983
	1830±50*	Pta-3418	
Limerock 1	1620±50	Pta-1621	Humphreys & Thackeray 1983
Dikbosch	1720±40*	Pta-3413	Humphreys & Thackeray 1983
	3060±60	Pta-1065	
Blinkklipkop	1160±50	Pta-2840	Beaumont & Vogel 1984
Doornfontein	1120±40	Pta-186	Beaumont & Vogel 1984
Glen Elliot Shelter	1120±70	Pta-3402/75	Beaumont & Vogel 1984
Tortoise Cave	1580±50	Pta-3309	Robey 1987
	1680±50	Pta-3512	
Elands Bay Open	1470±50	Pta-50	Horwitz 1979
Elands Bay Cave	1520±80*	GaK-4337	Parkington 1981
Diepkloof	1590±85	GaK-4595	Parkington 1977

Duiker Eiland	1700±50*	Pta-1581	Robertshaw 1979b
Stofbergsfontein	1550±55*	Pta-1903	Robertshaw 1979b
Steenberg Cove	1350±50	Pta-4010	Klein (1986)
Kasteelberg A	1860±60	Pta-3711	Smith 1984
	1790±40	Pta-3461	
Kasteelberg B	920±40	Pta-3742	Smith 1984
	880±50	Pta-3747	
Kasteelberg C	1270±50	Pta-3785	Smith 1984
Die Kelders	1465±100	GX-1685	Schweitzer & Scott 1973
	1600±120	GaK-3955	
	1590±80	GaK-3956	
	2020±95	GX-1686	
Byneskranskop Cave 1	1880±50	Pta-1865	Schweitzer & Wilson 1982
Pearly Beach 2	1680±50*	Pta-1069	Avery 1976
Boomplaas Cave	1630±40	UW-337	Deacon et al. 1978
	1510±75	UW-307	
	1700±55	UW-338	
Nelson Bay Cave	1930±60	GrN-5703	Vogel 1970
Scott's Cave	1190±100	SR-82	Klein & Scott 1974
Bambata	2140±60	Pta-3072	Walker 1983

sheep have been identified from the Kasteelberg B site while 34 were recovered from KBA (Klein & Cruz-Uribe 1989). Cattle and dog have been securely dated only from samples postdating 1300 BP. Klein & Cruz-Uribe (1989) postulate that a herder assemblage should be dominated by lambs (male lambs generally) and by older sheep (females) who are past their reproductive prime. The sample from KBB is dominated by lambs within the first 10% of their potential life-span. KBB, Die Kelders and Boomplaas, however, do not have sufficient post-prime individuals to suggest that selective culling of this category was taking place. Sheep age profiles are provided in Appendix 1. It is only KBA which contains a relatively large number of adults beyond 40-50% of potential lifespan, suggesting "the kind of rational flock management strategy we would expect to find reflected in a stockpost midden" (Klein & Cruz-Uribe 1989:90). Klein & Cruz-Uribe (1989:90) were unable, for a number of reasons, to determine the sex of the sheep at KBA and KBB, mentioning that the "sheep sex ratio is also uncertain at Die Kelders 1 and Boomplaas A".

"The dominance of lambs and the relative rarity of prime-age adult sheep at both sites suggest that the flocks were managed to maximize meat and possibly also milk yields", Klein and Cruz-Uribe (1989:95) remark with respect to KBA and KBB. At Die Kelders, Kasteelberg and Boomplaas a variety of other resources were also exploited indicating that the inhabitants were not subsisting only from their herds. With the exception of a single sheep individual from a layer dating to 2000 BP from Die Kelders (Schweitzer 1979) it is significant that the large samples under discussion all date to approximately 300-400 years *after* sheep was first introduced to southern Africa. It would appear that the association of sheep with dates of around 2000 BP may in fact be suspect (Sealy & Yates pers. comm.) and there are currently moves underway to accelerator date sheep remains from this time period.

Smaller sheep samples have been recovered from a number of Later Stone Age sites in the western Cape. They are generally described as 'soaqua' sites by Parkington (1977, 1984) because of associated material. Sites such as these may indeed have been occupied by herders (Schrire & Deacon 1989) but the argument is now that faunal remains alone may be insufficient to identify a pastoralist site. Sites with small sheep samples frequently exhibit a very varied diet with evidence for the hunting of small

game, the collection of plant foods and other small 'food packages', all characteristics, says Parkington (1984), of the 'soaqua'.

In the first place, with respect to the large numbers of juvenile individuals from the sites described above, it should be borne in mind that a neonatal mortality profile of 20-30% is common among contemporary pastoralist groups (Cribb 1984). Furthermore, we may also compare the mortality profiles of sheep from the Cape Province with the early stone age pastoralist site of Ngamuriak in south-western Kenya (Marshall 1990). The site dates to around 2000 BP and at least 98% of the sample is from domestic cattle and caprines. The caprine mortality profile (Marshall 1990, table 3a) is quite different from South African archaeological samples. Some 35% of the individuals were under 12 months, 20% were between 12 and 27 months while 45% were older than 27 months. The culling patterns from Ngamuriak clearly indicate that animals were killed only when close to maximum body weight. This strategy suggests Marshall (1990:92), on the basis of ethnographic analogy, "is typical of pastoralists in an unstressed situation, who are able to feed surplus animals until they reach an age when growth has slowed and maximum culling gains can be obtained". This conclusion is supported, she claims, by the high degree of fragmentation of the faunal remains which indicates that bones were chopped open for fat retrieval. Some pastoralist groups in East Africa were clearly able to subsist almost entirely on their herds some 2000 years ago but the early Cape pastoralists were obviously not in the same position. Slaughtering juveniles (male or otherwise) under the age of a year does not maximise meat yield. To the contrary, it suggests that pastoralists were probably living under considerable economic stress and that their flock management strategy was aimed at milk, rather than meat, production.

Archaeological evidence for the migration of pastoralism

Migration is often invoked as an *ad hoc* and somewhat mechanical explanation for anomalous site distributions, such as the abandonment of old sites or the appearance of new ones. Parkington (1984) claims that he has archaeological data from the western Cape which provides irrefutable evidence for the arrival of a new group of people and their disruption of the indigenous inhabitants of the region. Sites dating between 3000-1700 BP consist of large coastal middens dominated by mussel shells but containing few stone artefacts and faunal remains and Parkington believes that they are

coastal variants of occupation debris from open sites distributed in the deflation hollows of the coastal plain.

The introduction of domestic stock and pottery around 2000 years ago, according to Parkington, resulted in the abandonment of old sites and the occupation of new ones. Archaeological evidence for the pre-colonial presence of the 'soaqua' peoples is apparently abundant in the mountainous regions of the western Cape. Numerous rockshelters appear to have been occupied for the first time some 1700 years ago although the majority contain evidence for more intensive occupation after 500 years ago. They contain evidence for intense harvesting of underground plant foods and a subsistence tied largely to the exploitation of small ungulates, tortoise, hare and dassie as well as the occasional sheep. Some contain Cape coastal pottery although Sadr & Smith (1991) are of the opinion that they are also able to recognise a 'soaqua' type ware. Rock paintings on the walls of these shelters are further proof that they were occupied by hunters and gatherers rather than pastoralists. Parkington believes that the ceramic assemblages from these rock shelters are approximately contemporary with the numerous small shell middens which appear along the western Cape coastal margins during the last 2000 years. He does not, however, explicitly link these two types of settlement in a seasonal round of exploitation and we are left unsure of how, if at all, the 'soaqua' may have moved between them. The settlement pattern (small,coastal shell middens and small,interior rock shelters) discussed above, is ascribed to the upheavals resulting from the introduction of pastoralism some two thousand years ago.

The archaeological material discussed therefore represent the residual behaviour of former hunter-gatherers, termed 'soaqua' by Parkington (1984). While he (Parkington 1984:168) concedes that some of these 'soaqua' peoples may have formed alliances with the incoming herders, and "not denying the shadowy quality of intercommunity boundaries", he nevertheless subscribes to the view that " the appearance of pastoralism involved an influx of new people and that some communities continued to pursue an almost exclusively hunter-gatherer existence long after pastoralists intruded" (Parkington *et al.* 1986:317). The introduction of pastoralism, however, profoundly altered the lifestyle of the indigenous hunter-gatherers. Their retreat into refuge areas and the change in their economy resulted in considerable social stress, which Parkington *et al.*

(1986) have linked to increased trance performance and a greater incidence of rock painting. Changes within hunter-gatherer societies during the last 2000 years are therefore ascribed to external factors (incursion of pastoralists) rather than the internal evolution of their respective social systems with concomitant techno-economic changes (Bender 1986).

Evidence for changes in material culture coincident with the introduction of pastoralism

With respect to their lithic component J. Deacon (1984:273) is of the opinion that "In comparing pre- and post-pottery assemblages in general the change most commonly observed is a reduction in the frequency of backed microliths and segments in particular". Her concern is with documenting the continuity in lithic technology between pre-ceramic and ceramic assemblages, citing as examples Boomplaas Cave and Die Kelders Cave, rather than stressing differences attendant on the introduction of pastoralism. Humphreys & Thackeray (1983:296) remark of the archaeological data from the northern Cape "the same lithic artefact industry continued immediately after pottery arrived, it seems that the initial impact of pottery was minimal". Similar conclusions are reached by Kinahan (1984,1989) with respect to the introduction of pottery in Namibia. There is therefore considerable evidence from the *interior* sites in southern Africa to support Deacon's claim that "pottery and domestic stock were added to the pre-existing Stone Age tradition and that there is continuity in the range of stone tools made in each region" (Deacon 1984:269).

It is the informal lithic assemblages from the coastal regions, variously called "Strandloper" (Sampson 1974) or "post-Wilton" (Wilson 1990) which have stimulated the most debate. In Appendix 2 I show that informal quartzite assemblages were present along the southern Cape coast by at least 3000 BP and on the west coast by 2000 BP. Similar observations were made by Robertshaw as early as 1979. If we equate two different lithic traditions with two cultural groupings, then there is evidence for two 'identity-conscious social groups' in southern Africa *prior* to 2000 BP. We cannot hypothesise that it was pastoralist groups who first introduced the post-Wilton to the coastal margins. The reduction in the number of formal in the post-2000 period says Robey (1987:323) "may have been exacerbated or expedited by the introduction of herding, but was not caused by it". I propose that a macrolithic or informal industry

developed out of the Wilton and made its first appearance along the Cape south coast considerably in advance of the arrival of sheep and pottery. Whether Khoe-speaking pastoralists adopted this industry on settling in the region is a related but different issue.

Smith (1986a:40) has hypothesised that"microlithic assemblages were hunting toolkits, while the unnretouched flakes were made by herders". The archaeological data to support this conclusion were initially derived from the excavations of KBC and KBB on the Kasteelberg kopje. KBC contains a basal microlithic industry dated to ca. 2160 BP while the upper units, dated to 1270 BP, resemble the basal units of site KBB lower down the slope. The upper units of KBC and the lower units of KBB contained domestic stock but virtually no microlithic formal tools. A period of 890 years separates these two occupation horizons, during which the microlithic industry was replaced by a crude stone technology associated with domestic stock. "This suggests a major intrusion into the lives of the aboriginal foragers " (Smith 1987:399) although the hiatus between 2100 and 1300 BP means that we are not sure how this change may have occurred. Was there a gradual decrease in formal tool numbers or was the conversion abrupt? There are, in fact, no sites in the western Cape which span this crucial period of lithic transformation.

Smith is of the opinion that the upper units of KBB, dated to ca. 190 BP, represent 'forager' occupation of the site although their identity is not specified. It should be noted that the foragers in the 190 BP period did not revert to their former microlithic technology but continued using macrolithic tools. Smith *et al.* (1991) have contrasted Kasteelberg with the nearby site of Witklip, dated to between 3000 and 300 BP, containing formal tools and a predominance of small bovids. This is evidence, they insist, for hunters living in parallel with herders during the last 2000 years, each group with its own cultural identity. In their most recent paper (Smith *et al.* 1991) they have sought to substantiate this claim by excavating a number of coastal and interior sites in the south-western Cape. The archaeological data would suggest that a hunter-gatherer cultural package "comprises microlithic stone tools (mostly in silcrete), small ostrich eggshell beads, *Donax* scrapers and a predominance of hunted animals (particularly small bovids, such as *Raphicerus* spp.)" (Smith *et al.* 1991:87). A pastoralist signature

is defined as an informal stone industry, large ostrich eggshell beads and high ceramic densities associated with domestic stock.

Unfortunately, the 'norm', best exemplified by Kasteelberg, does not always hold when applied to other sites. So Voëlvlei, a 'hunter-gatherer site', contains high densities of ceramics and large beads while the inhabitants of Witklip apparently acquired their pottery from their pastoralist neighbours and at a later date also emulated their large beads. According to Smith *et al.* (1991) Voëlvlei is a mountain site overlooking the Swartland (which was occupied by pastoralists) thus making greater interaction possible between herder and hunter-gatherer. The approach followed in this thesis is that the greater the degree of contact between two 'ethnic groups' the greater the need to stress an own identity through various items of material culture. The question which naturally comes to mind is: how were hunter-gatherers able to maintain a separate identity if they were desirous of acquiring pastoralist material culture? They, for example, also used 'informal stone tools' (in the upper units at KBB), large ostrich eggshell beads and large numbers of ceramic vessels. It is these issues which need to be addressed.

With regard to the ceramics from the post-2000 BP period, it would appear that pottery was introduced very rapidly throughout southern Africa (Deacon 1984), the earliest sherds being thin-walled but later becoming thicker. The earliest pottery from Die Kelders (Schweitzer 1979) and Boomplaas (Deacon *et al.* 1978) does not have pointed bases and lugs. Typical 'Cape Coastal' (Rudner 1968) ware only appears at these two sites after 1600 BP (Deacon 1984) while Sadr & Smith (1991) were unable to construct vessel shape from the Kasteelberg pottery. Nevertheless the widespread distribution of Cape Coastal ware throughout the Cape Province soon after 1600 BP suggests either diffusion of certain traits as a result of considerable contact between herder groups or an associated movement of people. Several archaeologists have observed that they are unable to reconstruct ceramic vessels from the sherds collected at sites because not all the sherds from a particular vessel appear to have been present at the site. Kinahan (1989) is of the opinion that larger sherds may have been used as containers with important symbolic value in San society. He has remarked that perhaps the sherds were subject to the sharing ethic characteristic of hunter-gatherers and thus found their way into numerous sites where ceramic vessels may not have been used in the first place.

INTERPRETATION OF HISTORICAL AND ARCHAEOLOGICAL DATA

The current debate surrounding the separate identities of Khoekhoen and hunter-gatherer groups was initiated by Marks (1972:57); "there is little to distinguish a landless and cattleless Khoi from a Bushman, or a Bushman who has acquired cattle from a Khoi". The thrust of her argument revolved around the qualities of accommodation, adaptation and acculturation exhibited by the Khoisan peoples during the 17th, 18th and 19th centuries, for which she claims there is ample evidence in the documentary records.

The "Great Debate" in current hunter-gatherer studies has its antecedents in the scholarly study of the historian Elphick (1977,1985). Using 17th and 18th century historical sources, he attempted to prove the interdependent position of 'soaqua' hunter-gatherers and Khoekhoen herders at the Cape. Elphick (1985:25) rejected "the assumption that there were two distinct and non-overlapping economies among brown-skinned South African natives" and is of the opinion that "This Bushman-Hottentot [or San-Khoekhoen] dichotomy has become one of those time-honoured pairing mechanisms by which scholars automatically organize, but also distort, the complexities of historical reality". Elphick proposes an alternative model of "upward and downward ecological cycles" to account for the discrepancies in the historical literature. In the upward cycle, hunter-gatherers acquired stock through a variety of means and gradually made the change to full-scale herders, while in the downward cycle herders losing their stock reverted to hunting and gathering. The relationship between the two economies was fluid and there appeared no major impediments to individuals desirous of changing their status.

Schrire (1980), in an early 'revisionist' paper, suggested that this approach was also applicable to the prehistoric past in the western Cape as well as to contemporary San hunter-gatherer populations in Botswana. She asserts that there was 'a high degree of overlap in the economic life of indigenous people. Thus groups whose name should mean "hunters" were observed herding, while herders lived off the land' (Schrire 1980:26). She therefore aligns herself with the views expressed by Elphick (1977,1985) and Marks (1972). Discussing the site of De Hangen in the western Cape, she remarks that according to the historical and ethnographic literature both hunter-gatherers and pastoralists were recorded in the area. The archaeological data confirm that both types

of activities may have taken place at the site yet Parkington & Poggenpoel (1971) have attributed the entire assemblage to hunter-gatherers who occasionally preyed on domesticated stock. Schrire & Deacon (1989) return to this issue when discussing the indigenous artefacts from the colonial outpost of Oudepost I in the western Cape. Since the historical accounts document interaction between Dutch at the fort and nearby 'Khoekhoen' groups, Schrire & Deacon have attributed the indigeneous artefacts to Khoekhoen herders. The assemblage is similar to the ceramic Wilton encountered at many sites throughout the western and southern Cape dating to the last 2000 years. In a different context, the authors claim, it could well have been attributed to the 'soaqua' category created by Parkington (1984). The Oudepost I assemblage "demonstrates that it is the context of the artefacts rather than their form or typology that will inform on who made them" (Schrire & Deacon 1989:112).

Dissenting views have been expressed by Parkington (1984,1986) and Smith (1985,1986,1987,1990a,1990b, Smith *et al.* 1991). Parkington is of the opinion that the seventeenth century 'soaqua' represented a lifestyle quite distinct from the Cape Khoekhoen but which encompassed a wide range of subsistence strategies, from hunter-gatherers to client herdsmen. During the eighteenth century many Khoekhoen were dispossessed of their stock and were forced to assume a hunter-gatherer-raider lifestyle which became described as 'Bushmen'. Thus Parkington (1984:165) suggests "that whereas the soaqua life-style was the original hunter-gatherers' reponse to a pastoralist presence in the western Cape, the Bushmen life-style, as used in the same area, was that led by former pastoralists and foragers as a result of increased Dutch disruption". In addition to the historical and archaeological evidence discussed above, Parkington *et al.* also believe that there are theoretical reasons for rejecting Schrire's (1980) and Elphick's (1985) position. The main impediment to the "easy transition of individuals from hunting and gathering to herding is in fact the reciprocal sharing ethic which is imbedded in the social fabric of southern African hunter-gatherers" (Parkington *et al.* 1986:317). Citing examples of ethnographic observations made among contemporary 'hunter-gatherer-forager-herders' in Botswana they are of the opinion that these people find it extremely difficult to accumulate stock because of their social obligations to share.

Smith (1985, 1986, 1987,1990a,1990b,Smith *et al.* 1991) has consistently rejected the view of Elphick and others and it is necessary to consider his articles in greater detail as he is perhaps the foremost champion of "reasonably strict ethnic barriers" between Khoekhoen and hunter-gatherer economies (1985:90). In his critique (1985) of Elphick he queries the nature of the transition from hunter-gatherer to herder, citing as his fundamental premise "Hunters do not conserve or store food, nor do they deal with surplus as a basic criterion of accumulation and prestige, nor do they have hierarchical social organisations" (1985:89). Their sharing ethic would have made the accumulation of livestock difficult; once acquired, it would have necessitated changes in their social organisation (Smith 1986). There is considerable evidence, he avers, that hunter-gatherer social relations differed from those of pastoralists. Among the latter "relations of production are closely intertwined with the social needs of people and animals, such as inheritance or bride-wealth payments where animals are an integral part of symbolic or exchange systems" (1990a:8).

With regard to Khoekhoen origins Smith (1990a) tentatively agrees that they may have originated in an area around northern Botswana. He believes the first source of domestic stock to have been black agro-pastoralists who had possibly already established the southern Bantu Central Cattle pattern. Early Khoe-speaking hunter-gatherers would have been able to obtain stock from these people only if they had become incorporated into their hierarchical social organisation (Smith 1990b). Proof that the formative Khoekhoen groups would have been of low status is adduced from the fact that they owned only sheep (Smith 1990a). Furthermore, they would also have had to adopt the necessary social relations of production. Since contemporary ethnographic studies have shown that women in 'forager' societies are more equal to their male counterparts than in herding societies where they have a lower status, Smith (1990b) is of the opinion that in the transition to herding women would have lost a great deal of their status. It would therefore have been necessary for the social and cultural adjustments to be made in ideological terms. It is only when hunter-gatherers view their newly acquired stock in terms of exchange, inheritance and symbolic value, rather than only as commodities, that the transformation can be said to have been complete; i.e.,"the transformation in ideological terms separates the two productive systems" (Smith 1990b).

References to "incoming herder people" and "introduction of new economic systems" imply that Smith (1986) is consciously promoting the model of a migration of people into southern Africa although this is never explicitly stated (1986). He rejects the notion of the diffusion of pottery and sheep into the western Cape hunting society, citing as his argument the ideological problems discussed above. Although he favours the west-coast model of pastoral expansion (1990b), Smith is also of the opinion that the Korana were longstanding residents of the Orange River (1985:89), citing archaeological evidence from a site near the Augrabies Falls which has been dated to 760 BP. There is obviously no proof, however, that the site should be that of Korana people.

According to his first model of pastoral interaction with the indigenous hunter-gatherers Smith (1986) suggests that initially pastoral numbers may have been fairly low and interaction with the indigenes may have been quite amicable. In a second model (1990b), he proposes otherwise: the herders "would have been entering territories of hunters with whom they would have to negotiate. The relatively rapid southward movement over two centuries may have been a reflection of the less than amicable relations with the hunters forcing the herders to move until they ran out of places to go". During this initial period (2000-950 BP) herders may have been staying at the coast for extended periods. When herders first acquired cattle in numbers around 1300 BP, Smith suggests greater disparities in wealth would have emerged between them and the aboriginal hunter-gatherers. Their cattle would also have placed pressure on available grazing on the coastal margins and herders were forced to move further afield. Smith (1984) has suggested that pastoralist groups would have preferred to pasture their stock on the higher nutrient-status strandveld rather than the heathlands of the mountains, which formed the refuge of the hunter-gatherers. The large herds of domestic stock would naturally have competed with the large wild herbivores for pasture on the coastal forelands. Parkington *et al.* (1986) do not indicate whether the impact of domestic stock was severe enough to significantly alter the game populations but they do suggest that the shift in the location of hunter-gatherer sites "reflects a decreased expectation on the part of residual hunter-gatherers of taking large food parcels such as eland or hartebeest "(1986:325). It is important to mention, however, that increasing reliance on small food packages, described as part of a process of

intensification (Hall 1990), has been observed in many areas of southern Africa during the late Holocene and may not be directly attributable to pressures of incoming pastoralists.

According to Smith, herders were able to rely on a more sustainable resource, namely milk from their cattle and this would have placed them in a favourable position to develop more complex political organizations. The need for additional labour to care for their large herds would have resulted in a client relationship with some hunters. Intermarriage may have occurred between them but herders would only have taken wives from hunting groups and not vice versa and bridewealth would have been paid in sheep and oxen and not breeding stock (1986). Reviewing the revisionist position with regard to hunter-gatherers, Smith (1990a) believes that they were nevertheless marginalized through association with more dominant groups and suggests that they would have been in a similar position *vis-a-vis* the Khoekhoen 2000 years ago. They would have found it equally difficult to gain access to stock in the past unless they had established a form of client relationship with the dominant society. Since they were denied access to breeding stock this led "inevitably to alienation and maintenance of hegemony by richer herders" (1986:39). He therefore suggests that an incipient class structure had emerged, with the Khoekhoen controlling the means of production. The incorporation of hunter-gatherers into Khoekhoen society he believes to have been a phenomenon of the colonial period, i.e., assimilation is an eighteenth century occurrence (1990b). Smith's position is, then, that the 'soaqua', or hunter-gatherers, co-existed, albeit in an inferior position, with the Khoekhoen for 2000 years without losing their identity.

While all the authors cited above have implicitly accepted a migration of pastoralist peoples into southern Africa, only Kinahan (1989) has clearly come out in favour of the diffusion of pastoral traits instead. In his review of the emergence of pastoralism in Namibia he rejects the migration hypothesis because he can find no evidence in the archaeological record for ethnic succession. His hypothesis is that "nomadic pastoralism arose out of the indigenous central Namib hunting economy when fundamental ideological change permitted the accumulation of property in domestic stock" (1989:18).

His archaeological data from the Namib suggest the adoption of domestic animals and a transition to pastoralism among hunters. Although he reviews Elphick's (1985) model of the spread of Khoe-speaking pastoralists from a centre in northern Botswana, he does not link this linguistic information to his archaeological data. We are not presented with a model of whether, and how, local hunter-gatherers in the Namib 'borrowed' livestock and pottery from Khoe-speaking pastoralists en route south. Did his hunter-gatherers also adopt the Khoe language? With which historical 'group' can these hunter-gatherers, turned pastoralist, be identified ? Did they become Nama? Or Dama? Or did they retain their hunter-gatherer identity but become pastoralists? Kinahan (1989:166) neatly avoids these issues by claiming that "the nomadic pastoral economy as I have reconstructed it does not admit of ethnic or geographical limits as rigid as those suggested by colonial historians and administrators".

Although the archaeological material from Namibia may indeed support Kinahan's assertion that pastoralism arose out of the transformation of the hunting economy, I believe the questions posed above, need to be addressed. Kinahan's (1989:159) dismissal of nineteenth and twentieth century pastoralist ethnographies from Namibia and South Africa means that he is unable to draw on a wealth of ethnographic material which could profitably be utilized to interpret the stone features from the Hungorob. There are many problems with the application of general models of pastoralism as I point out in chapter 2.

Kinahan's assertion that he has presented an alternative approach to the conventional view that "pastoralism arrived in the western Cape with an immigrant people" (1989:170) is clearly problematical since he has not adequately considered both linguistic and archaeological data from this region. The Khoekhoen pastoralists first encountered in the sixteenth and seventeenth centuries in the south-western Cape spoke a language, which, as far as we can ascertain, differed from that of the aboriginal peoples. In addition, there is considerable evidence that pottery, and probably also sheep, were present in the southern and western Cape some 2000 years ago, while Kinahan's Hungorob population had pottery for a thousand years before they acquired stock. Kinahan's diffusionist approach may provide a satisfactory explanation for his data from Namibia, but cannot be readily transposed to the western Cape Province.

DISCUSSION

The most salient issues described above may be summarised as follows:

(1) There is still considerable uncertainty about exactly when and where Khoekhoen pastoralists diverged from Khoe-speaking hunter-gatherers.

(2) 'Khoe' was a remarkably homogeneous language while the 'Bush' languages are characterised by heterogeneity.

(3) Several linguists have indicated that early Khoe-speakers obtained their stock *before* they came into contact with Iron Age communities since the latter appear to have borrowed their terminology for livestock from the former. More recently, however, objections have been raised to this interpretation.

(4) With respect to their social organisation, the Khoekhoen and Khoe-speaking hunter-gatherers shared a common origin and common structures.

(5) Although Namaqua and Korana have been grouped together and opposed to Cape Khoekhoen, there is growing evidence to suggest that Koranna was derived from Cape Khoekhoen and is quite distinct from Nama. This alternative view invalidates aspects of Elphick's model of Khoekhoen dispersal.

(6) Metrical analysis of crania ascribed to the Khoekhoen and 'Bushmen' suggest a distinction between them for inland areas. However coastal populations are not so clearly separated and there is no evidence for a major population succession. Stable carbon isotope studies would support this conclusion.

The archaeological evidence can be summarised as follows:

(1) Although there is general agreement that lithic artefacts became more informal during the last 3000 years, few archaeologists would be prepared to ascribe their introduction to the arrival of the Khoekhoen. Coastal lithics do differ from those of the interior but perhaps we need to look at other explanations such as more stable coastal populations and therefore different cultural groupings emerging during the last 3000 years.

(2) More convincing evidence for the 'influx' of new groups is the change in site location in the western Cape during this period. We need more accurate dates however in order to determine whether this occurred at ca. 2000 BP or some 300-400 years

later. It is my belief that these first five hundred years of pastoralism in southern Africa will prove crucial to our understanding of assimilation versus ethnic group formation. (3) While sheep have been identified from sites dating to 2000-1900 BP, all the large samples date to around 1600 BP. Cattle, on the other hand, seem to appear in numbers only after 1300 BP (Klein 1986; Klein & Cruz-Uribe 1989). The mortality profiles of sheep from the three major 'herder' sites namely, Boomplaas, Die Kelders and Kasteelberg differ from ethnographic samples and from archaeological samples from the 2000 BP period from East Africa. The very high proportion of juveniles under 12 months of age suggests that livestock in the southern Cape was initially managed for its milk yield or to increase stock numbers but was not a major source of meat or fat. This is usually a phenomenon of stressed conditions.

I have shown in this chapter that Schrire (1980) and Elphick (1977,1985) are of the opinion that the extreme fluidity which characterised Khoekhoen and hunter-gatherer relations in the colonial period probably also pertained to the prehistoric past and identify the 'ethnic' group responsible for a certain archaeological configuration by the 'context' in which the material is found. There is a move by Parkington (1984, Parkington *et al.* 1986) and Smith (1990a,1990b), however to attempt to link together several of the variables mentioned above. So Parkington (1984:159) defines soaqua according to a set of negative traits "not having cattle, stealing, not having huts, and wearing less attractive clothing". In a later paper, Parkington *et al.* (1987:317) suggest "The terms Khoi and Soaqua (San) are in fact structural categories defined in terms of one another, each the negative of the other". Smith (1986, Smith *et al.* 1991) has constructed a pastoralist society which owns large flocks of sheep and herds of cattle, has an informal lithic industry, makes large ostrich eggshell beads, and whose sites yield high ceramic densities. In other words, he has attempted to isolate a number of social, economic and artefactual variables which together will allow him to distinguish one society from another. Smith (1985:89-90) argues that "reasonably strict ethnic barriers existed between the two economies", and that hunting societies "continued an existence separate from later herding economies until well after European settlement" (Smith *et al.* 1991:89). While some hunter-gatherers may have become clients of Khoekhoen herders, the relationship between the two groupings is not considered to have been equal. Furthermore, increasing Khoekhoen control of the landscape (in the

form of cattle herding as well as kraals of matjies (reed) houses) after 1000 BP meant that hunter-gatherer groups were becoming more marginalised through time.

The issues to be addressed in the following chapters revolve around the discussion presented above. The lack of any data confirming ethnic succession with the arrival of pastoralism some 2000 years ago suggests that initial numbers of Khoe-speaking herders were small. One scenario would consider that considerable assimilation took place between immigrant pastoralists and indigenous hunter-gatherers, while another postulates that hunter-gatherer groups at the Cape some 2000 years ago became marginalized by the incoming pastoralists. Were they a convenient labour pool to be drawn upon, a minority group subject to the hegemony of an emerging Khoekhoen society? If so, how do we explain their ability to maintain a certain measure of autonomy (and an own identity) for close on 2000 years? This, I argue in the following chapters, could only have been achieved through strict boundary maintenance and differences in material culture. I attempt to determine whether there is any evidence for two separate cultural groupings in Namaqualand during the last 2000 years.

2. THE STRUCTURE OF LITTLE NAMAQUA SOCIETY

In answer to a question regarding the origin of the Little Namaqua, Kasaap told Gordon (Smith & Pheiffer 1992) the following tale:

> "there was an old but sprightly woman from Great Namaqualand who had strayed from her country looking for food. She was named *Kouws* who then lived alone and sought her food in the veld. Then, long afterwards an old but sprightly man also strayed from his country in the same manner and he found that woman and then married her. The man's name was *Koebeseeb* and all the Little Namaqua are descended from them, and all the Little Namaqua are called after them, one half *Kobbequa* (*Koebeseebqua*?) and the other *Kaus ku* (*Kouws kwa*?) after the man (woman?)".

There has been a tendency among researchers into pastoralist societies to emphasise pastoral productive forces and ignore their social conditions. In this reconstruction of Little Namaqua society, I deliberately eschew a cross-cultural approach in which general laws concerning sustainable herd sizes, labour requirements, the reproductive capacity of the animals, etc., are derived and applied on an *ad hoc* basis. This approach may be compared with the work of the New Archaeologists who attempted, to paraphrase Hodder (1982b), to 'reduce variability to sameness'. General theories of pastoralism are similar to general laws of culture process, they derive their integrity from broad generalizations which, unfortunately, obscure historical processes. In this chapter I am concerned to show that the social configuration of the Little Namaqua pastoral formation derived its unique character from a particular set of historical processes.

A variety of historical and ethnographic data is drawn upon below to reconstruct Little Namaqua society. In this chapter, I attempt to integrate ethnography with the history and anthropology/archaeology of material culture and social change. In our application of ethnographic data we should "always refer to the past and to the process of becoming in the present" (Hodder 1986). The abundant historical and ethnographic sources pertaining to both the Little and Great Namaqua are an invaluable source of information and for this reason I do not reject them out of hand as have Kinahan (1989) and Lau

(1987). Like Hodder (1986:144) I believe that "Archaeologists have greatest confidence in direct historical analogies where the spatial context is constant and the temporal gap is slight". These sources allow us to document the trajectory of social change among the Namaqua from the seventeenth century up to the present and permit various deductions to be made about pre-seventeenth century social formations which can be tested against the archaeological data obtained from the region.

HISTORICAL BACKGROUND

I present a brief summary of published material relating to the history of the Little Namaqua below. Further details are provided in the Appendix 3 but a more complete review of various archival sources lies outside the scope of this thesis. Elphick (1985) described the Namaqua as one of four large tribal clusters of Khoekhoen people, the others being the Cape Khoekhoen, the Korana and the Einiqua. We know from sources such as Wikar, Paterson and Gordon that there were Khoisan peoples living side-by-side with Bantu-speaking communities along the middle Orange River area by the end of the eighteenth century. While it is beyond the scope of this thesis to attempt to unravel the political history of the northern Cape region, I point to the complex system of interaction and the fluidity which characterised relations between groups throughout the historical period. Earlier I postulated that the Korana were, in fact, a Cape Khoekhoen group. According to Nienaber (1989), historical and linguistic data support Engelbrecht's (1936) hypothesis that the Gorachouqua, also known as the Tobacco Thieves, moved northward from Table Mountain in 1680 and were re-discovered as the Great Korana in the middle Orange River region a century later. It follows from this that historical and ethnographic data relating to the Korana would then inform us, in a very limited fashion perhaps, of Cape Khoekhoen traditions and may be contrasted with more comprehensive material relating to the Namaqua.

The Namaqua Khoekhoen featured very intermittently in correspondence during the first 30 years of Dutch occupation at the Cape. According to seventeenth century explorers to the region, the Namaqua were largely concentrated in the Kamiesberg mountains, although they were observed to move considerable distances northward as far as the Orange River and south as far as the Olifants River. The evidence is sketchy as yet, but

there is a possibility that they were still in the process of southward expansion when their movements were halted by advancing Trekboers in the eighteenth century (Elphick 1985:136). It is not clear whether the Namaqua regarded the entire Namaqualand as their territory, but it would appear from early reports that population numbers were small and people were very sparsely distributed across the landscape. This may in part have been due to the extremely arid environment which made a considerable degree of transhumance essential.

The history of European contact and observations relating to the Little Namaqua are provided in Appendix 3. To summarise briefly: many of the early accounts seem to indicate that the Little Namaqua inspired considerable respect and were widely feared by the Cape Khoekhoen groups. They were reputed to be extremely wealthy in cattle and sheep; their use of ox-hide shields, their wealth of copper and iron jewellery and their ability to prepare beautiful skins, are said to have set them apart from their southern neighbours. While these differences have been cited as proof of Little Namaqua seclusion, observations dating to 1661 of warfare between the Namaqua and Oedasoa of the Saldanhars (Cochoqua) clearly belie claims of Namaqua isolation. They, it would appear, were as much part of the Khoekhoen political arena as any other group.

Seventeenth century accounts indicate that bands of 'soaqua/sonquas' lived interspersed among the Namaqua. It is important, however, that the merits of each report be examined individually as these identifications may, in fact, not be very secure. So, for example, van der Stel's 'soaqua' turned out to be a Kamesons (possibly a member of the !Gami=/nun tribe of the Namaqua according to Moodie (1960)). Some of the Kamesons were living among/visiting/trading (?) with the Namaquas in the Kamiesberg in 1685, which proves that there were extensive movements among Khoekhoen groups throughout the northern Cape region well before European influence could be held responsible for their dispersal.

We may infer from early seventeenth century accounts that some 'soaqua' groups were involved in a client type of relationship with the Little Namaqua. References to 'their bushmen' indicate that the Namaqua were also responsible for protecting the 'soaqua'

associated with them. This scenario changed dramatically during the ensuing half-century. The extensive illegal trade in livestock which took place between the Dutch Trekboers and the Namaqua resulted in a rapid decline in the latter's stock numbers. Smallpox epidemics decimated the population so that by the 1780s the Little Namaqua were not able to defend themselves against frequent 'soaqua' attacks. The historical accounts presented in Appendix 3 document a period of rapidly changing relations between the Namaqua and the 'soaqua'. During the seventeenth century these two societies, from what we can gather from limited information, lived interspersed among each other, although the Namaqua seem to have been concentrated in the mountains, while the 'soaqua' lived in the plains. During the early eighteenth century a form of symbiotic relationship emerged, with the 'soaqua' taking care of the Namaqua stock and receiving their protection in return. By the end of the eighteenth century the dramatic reduction in Namaqua livestock and increasing pressure exerted by the northward moving trekboers precipitated a conflict of interests and fierce competition. It was now the Namaquas' turn to request protection, from their most militant adversaries, the 'soaqua'. When Gordon (Raper & Boucher 1988) visited the Kamiesberg in 1779 he found that the kraal of the chief of the Little Namaqua consisted of only nine huts, while the entire Little Namaqua nation amounted to only 400 people. The majority of the Little Namaqua had moved north across the Orange River, while others found employment on the farms of Trekboers who were settling in Namaqualand in increasing numbers.

Gordon's encounter with a small band of people living to the north of the Orange River is considered in some detail in Appendix 3, as it suggests that, at least by the late eighteenth century, some of the Namaqua were following a hunter-gatherer existence. This scenario is entirely consistent with documentary evidence which clearly indicates the extraordinary state of flux prevalent in many areas of the northern Cape toward the end of the eighteenth century. One can only speculate on the identity of those 'shore bushmen' mentioned in the earlier literature; some, as I have shown, may have been Kamesons, others were 'beach Hottentots' who owned cattle (see Appendix 3), while others appear to have had the social structure of the Namaqua Khoekhoen yet followed a hunting and gathering existence.

The Little Namqua entered the final stages of a very rapid political and economic decline during the nineteenth century. In a desparate bid to retain a small portion of their land and some of their independence they appealed to the church to establish a mission in their midst. The Reverend B. Shaw established a mission at Leliefontein in the Kamiesberg in 1816 (Shaw 1970) which became the focus of the Leliefontein Communal Reserve proclaimed in 1854. Shaw appropriated the authority of the chief, encouraged the community to take up the precarious business of agriculture and encouraged them to build permanent homes (Price 1976). Many, unable to eke out a miserable existence on the reserves, became employed in the copper mines around the town of Springbok while others continued working for white farmers. Other reserves were later established at Steinkopf, Kommaggas, Concordia and the Richtersveld; and the Little Namaqua, who had once roamed the entire region, were confined to reserves which were only a fraction of their former territory.

AN ETHNOGRAPHIC RECONSTRUCTION OF NAMAQUA SOCIETY

There is, as Tapper (1976:45) pointed out, "no social form common to all pastoral societies". Considerable variability has been observed among pastoralist groups; it is not surprising, therefore, that Little Namaqua social organisation differs substantially from those of East African pastoralist groups.

In this reconstruction of Little Namaqua society I have made use of material collected by Hoernlé and other twentieth century ethnographers. In defence of this, I should like to make the point that it is probably no more valid to use material collected in 1850 than data relating to 1920 when reconstructing the pre-colonial past. I have shown above that even eighteenth century accounts document periods of very rapid change in the political organisation of the Khoekhoen. As archaeologists and historians we are, nevertheless, able to speculate on the social and economic consequences of these events and to trace the trajectory of change up to the present. Ethnographic data, when placed in their historical context, present us with an opportunity to examine the transformations in Little Namaqua society during the colonial era.

In this analysis of the social relations of the Little Namaqua I have adopted the terminology of critical theory (Historical Materialism) merely because it allows me to isolate and define certain concepts more readily than other theories. I do not follow all the tenets of this theory, however, as will become apparent in my discussion of Little Namaqua ideology. In order to understand how the society functioned (a) we need to determine who 'owns' the resources within the society (and therefore controls the means of production), (b) we have to consider the division of labour, i.e., which social processes determine who shall work and who shall not; and, finally, (c) we need to establish how the products of labour are distributed and possible surpluses appropriated. It has generally been assumed that the Khoekhoen, in general, were a strongly patrilineal society and that it was therefore the male heads of clans or, more specifically, the captains/chiefs who controlled the means of production.

Much new information on the nature of Khoekhoen society, however, has recently come to light, thanks to the careful analysis of historical and ethnographic literature undertaken by Barnard (1975, 1980, 1987, 1988). "The Nama consist of two sub-groups, the Great Nama of the central plateau of South West Africa/Namibia and the Little Namaqua of the north-western Cape Province of South Africa. Each sub-group is divided into several tribes, and a tribe is believed to number all the patrilineal descendants of its putative founder. Each tribe, in turn, is divided into several patrilineal localized clans and each clan into patrilineally organized extended families" (Barnard 1975:9).

Although the Great Namaqua and Little Namaqua may originally all have been members of one tribe, by the nineteenth century, the Great Namaqua were divided into seven tribes. Hoernlé (1925), much influenced by the anthropological theory of the day, described the sub-divisions of the Great Namaqua tribes as "patrilineal sibs (clans)", "that is, groups of people claiming to be related in the male line". In her opinion, the clan was the strongest social unit the Nama ever attained. Barnard (1988:45) also favours this interpretation of Hoernlé's ethnographic material, claiming "Kin category is overridden in importance by hierarchical principles of categorisation. Lineages stand in relation to others according to rules of seniority and alliance". Elphick (1985:39),

however, has strongly denied the existence of the segmentary lineage system among the Khoekhoen. Did the Little Namaqua have a segmentary lineage system?

According to the definition of segmentary lineage theory, lineages stand in relations of complementary opposition to one another, i.e., they compete at certain levels but associate at a higher level. I could find very little evidence for competition between "lineages", i.e., the followers of a particular captain, among the Little Namaqua during the historical period. Each chief seems to have been remarkably autonomous, the consequence, we may infer, of the dispersal of groups during certain seasons, which made it difficult to maintain a centralized authority. Hoernlé (Carstens 1985; Carstens *et al.* 1987) and Lau (1987) have documented considerable evidence for competition among the Great Namaqua during the nineteenth century; however, there is little evidence that they associated at a higher level. It is my contention that these lineages emerged largely because of the political upheavals resulting from Oorlam incursions into the area.

In a critique of segmentary lineage theory, Bonte (1979) has asserted that it is clearly functionalist in nature as it embodies the concept of adaptation to the environment. The appropriation of the herds and of the pasturage among the Namaqua, like other pastoralist groups, actually takes place at the level of the family and therefore "one is led to question the true significance of the corporateness of unilineal descent groups" (Bonte 1979:214). Ascertaining the existence of segmentary lineages in the pre-seventeenth century period would appear to out of the reach of archaeological research, but this aspect of Little Namaqua social structure is mentioned here for completeness.

In the absence of segmentary lineage organisation, what form did the community take? Speaking about non-stratified, stateless pastoral communities in general, Lefébure (1976:4) asserts that "the real existence of the community entity and property depends on the relations established in the course of productive activities by the different *domestic units*" (my emphasis). The historical literature indicates that the Namaqua were distributed about the Kamiesberg region in a number of 'kraals'. We may infer that each 'kraal' consisted of a clan, or a section of a clan, under the leadership of a

chief or captain. So van der Stel, for example, met with at least 5 Namaqua captains while he was in the Kamiesberg in 1685 (Waterhouse 1932). Political power and leadership in Namaqua society resulted from wealth in cattle, the richest man invariably became the chief, called *kawaup/ghawaup/kawaub* by Gordon (Smith & Pheiffer 1992). Hahn (1971:13) describes a rich man (*!khu-aob*) as being identical to a fat man (*gou-aob*); both terms being used for chiefs and rulers. "A rich man (*gou-aob*) was a fat man; he could afford to be fat (*gousa*); he could anoint himself with fat (*goub*)" (Hahn 1971:13). Since wealth in cattle depends on the vicissitudes of fortune it follows, too, that political power remained unstable. In theory, chieftainship was hereditary; in practice it also depended on wealth, skill in hunting, cattle-raiding and personal qualities of leadership (Elphick 1985:68). Fission, therefore, frequently occurred on the death of a chief. Chiefs signified their positions by adopting 'subtle' external symbols, such as a larger hut, a kaross of a magnificent wild animal, or by the application of additional grease to the body. Both Wikar (Mossop 1935) and Gordon (Smith & Pheiffer 1992) refer to a custom prevalent in the northern Cape in which a wealthy Namaqua would advertise his riches through a milk-drinker. This entailed secluding a specific individual for an entire year and feeding him only milk; when he emerged from his hut his size proclaimed the wealth of the person who had provided the milk.

The chief presided over disputes regarding inheritance, gave permission for the veld to be burnt to encourage new grass, demanded his share of any game obtained during hunting and saw to the needs of strangers who passed through the land belonging to the tribe (Wandres 1908). The custom of providing the chiefs of the Great Namaqua with selected parts of slaughtered stock and the surplus milk was aimed, claims Lau (1987), at buttressing 'chiefly power' and dependency. Chiefs such as Hendrik Witbooi, however, had, with the aid of horses and guns, established a military oligarchy based, not on kin or genealogy, but on feudal-type allegiances and tributes. While chiefs among the Cape Khoekhoen tribes would appear to have exerted considerable authority, it is important to remember that the more fertile pastures of the south-western Cape allowed larger clan groupings and settlements than in the more arid Namaqualand region (Carstens 1969). In my opinion, there is insufficient historical evidence to suggest that the chief among the Little Namaqua was able to command the degree of respect and authority Lau has indicated for southern Namibia.

The kraal, then, consisted of several families related in the male line under a captain. These larger groupings comprised a variable number of domestic units collaborating to perform certain aspects of the economy, such as regulating access to the hunting and grazing lands, as well as determining rights to firewood and water. Co-operation was generally accompanied by co-residence, at least during certain portions of the year. Bonte (1979:218) makes the point that "it is on the basis of more or less voluntary and equal forms of association that the effective utilisation of resources is determined". This form of association was generally marked by ties of *kinship* which in effect functioned to facilitate and control the relations of production.

The form that these larger kraals took has been frequently described in early historical records relating to the Cape Khoekhoen. With respect to the Namaqua, we are dependent on Hoernlé's (1925) classic description of the settlement organisation of the Great Namaqua which is based, on her own admission, on oral information obtained from several elderly men. This pattern she describes was no longer in existence but matched that of historical accounts relating to the Cape Khoekhoen. I submit that one reason for this could be the fact that large numbers of Oorlam people from the Cape Peninsula area had settled in southern Namibia during the latter half of the nineteenth century. It is possible that Hoernlé may have been recording an extinct Oorlam settlement pattern rather than one characteristic of the Namaqua. A close examination of historical drawings of Namaqua and Korana 'kraals' (Burchell 1953; Campbell 1815; Chapman 1971; Paterson in Forbes & Rourke 1980) confirms a suggestion made by Carstens (1969:100), namely, that "local groups tend to be small and discrete, even though this may be to their economic disadvantage ". He asserts (1969:97) that the circular residential pattern of the Cape Khoekhoen was the "function of habitat and expediency" and did not occur among the Namaqua. Even when 50 or more huts are mentioned in one kraal we are unsure whether they took on a circular pattern or were spread out among the hills and valleys. Kinahan (1989) for example, has shown that the mat huts in Burchell's (1953) controversial sketch of a "pastoral encampment" are not arranged in a circle but are clustered instead. Researchers, such as Haacke (1982), all emphasise that the entrances of houses always faced east. According to the historical accounts (Appendix 3), these larger aggregations usually formed in the summer months around permanent springs in the Kamiesberg.

However, it is as a member of the domestic group that one is entitled to access to the communal property. The basic unit of production in Namaqua society, as I have pointed out previously (Webley 1984, 1986), is the nuclear or extended family. It may include three generations; father, married sons and their offspring, although it is generally at this point that fission of the domestic group takes place. Appropriation of the herds therefore takes place at the level of the domestic group, i.e., the nuclear or extended family. "It is within the residential group that pastoral work is effectively carried out and that communally held resources are really appropriated" (Bonte 1979:212). It would seem that it is the domestic group, therefore, who 'own' the resources (livestock) in Namaqua society and therefore control the means of production.

In addition to the domestic and communal forms of production, there is also another level of social organisation in Namaqua society, namely, the co-residential group frequently called 'camps' in pastoralist literature. It consisted of several domestic groups who resided together for part of the year in order to pool productive resources, including labour. So Hoernlé (Carstens *et al.* 1987:22) remarked on her journeys through the Richtersveld, that "the huts are scattered about in the kloofs". On one occasion she visited a settlement of three 'werfs' (camps or homesteads) and on another 5 'werfs'. During my ethnographic fieldwork in Leliefontein between 1984-1988, I interviewed 18 elderly individuals regarding the number of families who generally trekked together in the winter months. Informants indicated that between two to six (mean four) families (brothers or father and sons) as well as friends settled together between 50 and 150 metres apart in a certain area during the winter months. In this respect it is instructive to note that Johnson (1983), reviewing the literature on camp sizes (minimal nomad aggregations) among nineteen nomadic societies around the world, concluded that they consisted of a mean of six families. In his opinion, the development from a non-hierarchical to a hierarchical structure (with group leadership) occurs most commonly in nomadic groups comprised in excess of six families. If a hierarchical structure does not emerge there is likely to be increasing stress and a decline in group decision performance. Groups with five or fewer families display a

superior decision performance to those that are hierarchically structured. It appears that this is related to "limitations on the ability of individuals to monitor and process information" (Johnson 1983:176). Decisions usually taken in the minimal nomadic aggregation (Webley 1984) consisted of when to move, where to move and with whom to move. These camps have "no year-to-year continuity, no claims on particular areas of grazing and no legal or other collective responsibility for members" (Bates quoted in Johnson 1983). They are temporary and shifting (Lefébure 1976:3) because they do not constitute a social or political unit. Their basis is economic, as they "exhibit a temporary, mutual interest in the exploitation of local resources" (Spooner 1973).

We should not, however, merely presume that it was the male head of the household who owned and controlled the herds. A frequently cited misconception in literature pertaining to the Khoekhoen is that emphasising patrilineal descent. This was, in fact, not the case. Barnard (1975:9) explains, "There are two principles of descent among the Khoekhoen. Every Khoekhoen is a member of: 1) a *patrilineal localized clan* (or some smaller patrilineally recruited localized unit), and 2) a *cross-descent name group*". Both of these groupings are exogamous. Basically the second category means that a male "acquires membership in the group of his *mother* and a female in that of her *father*" (1975:10). In other words, all girls will be named after their father and all boys after their mother. This custom applied to both the Namaqua and the Korana and has been described by Hoernlé (1925), Engelbrecht (1936) and Hahn (1971). Barnard (1975:11) explores the consequences of the system of cross-descent in some detail arriving at some very interesting conclusions. Since residence is ideally virilocal, after a period of uxorilocal residence, it follows that a woman will take her name "to the patrilineal localized group into which she marries, where it is transferred to her sons". Her sons will in turn give their name to their daughters, who will marry and take the name elsewhere. A name therefore remains in a particular clan or localized group for only two generations.

People with the same great name recognize membership of a common descent group even if this cuts across clan or tribal boundaries. There is a further complication, however. There is evidence for prescriptive matrilateral cross-cousin marriages among certain Great Namaqua tribes, such as the Red Nation (Hoernlé 1925:21), as well as

among the Korana (Engelbrecht 1936:127). It is therefore interesting to note that Robert Gordon (Smith & Pheiffer 1992) explicitly indicates that cousins should not marry. Wikar (Mossop 1935:29), however, remarks that while marriages among cousins were forbidden in the past, a certain chief of the Red Nation had "decreed, in his own interests, that cousins might marry". It would appear that changes in marriage rules were taking place even before significant European penetration of the region. Opposite sex cross-cousins are potential spouses as they stand in a joking relationship to ego. Among the Korana in particular, a son stood in a special relationship with his mother's brother; he is, for example, allowed to go to his uncle's kraal and collect any animals without payment. If, therefore, he marries his uncle's daughter then he is able to take back the cattle which he gave his uncle in bridewealth. The Korana say that matrilateral cross-cousin marriages allow "property" to stay within the family (Engelbrecht 1936).

Among the Korana the kraal which 'gives' the wives is called the 'great kraal', while the kraal which 'takes' the wives is the 'little kraal'. If, therefore, every man marries his mother's brother's daughter, then cross-descent name groups must also stand in a wife-giving/wife-taking relationship. A man who marries his matrilateral cross-cousin is taking a wife of the same descent group as his mother's father (Barnard 1975:13 Fig 2). Members of a given cross-descent name group will always marry members of a second given cross-descent name group, resulting in a 'wife-giving' and a 'wife-receiving' patrilineal localized clan. Hence the apellatives Great and Little Namaqua? It seems clear, says Barnard (1975:16), that 'men of the "little" clan marry the daughters of, and perform bride-service for, men of their "great" clan'. This system does not represent a simple "generalized exchange" of women, he asserts. In view of the considerable power wielded by the women among the Nama (discussed below) and the "relative sexual equality among the Khoekhoen" (ibid. 1975:15), it follows, he says, that "*women can be 'exchanged' for men.* The system might then be interpreted as one of delayed restricted exchange. Men are exchanged for their mothers and women for their sons" (ibid. 1975:16).

Carstens (1983) has eloquently argued that the system of cross-name descent considerably weakened principles of patrilineal descent as sons identified with their mothers and others sharing the same great name. This point has considerable bearing

on the nature of pastoral control over the productive forces. Furthermore, there is evidence to suggest that women could also inherit livestock from their fathers. Although all the indications are that inheritance was strictly patrilineal among the Cape Khoekhoen, and Gordon (Smith & Pheiffer 1992) also emphasises that only males could inherit livestock among the Little Namaqua; nevertheless, according to both Wandres (1908) and Hoernlé (Carstens *et al.* 1987) both sexes among the Great Namaqua could, and did, inherit. Two examples of inheritance among the Bondelswart tribe of the Great Namaqua are provided in Hoernle's field diaries and an examination of their testimony indicates that "Each individual irrespective of sex, age, and marital status is entitled to inherit and possess private property" (Carstens 1983:59).

According to Wandres (1908), on her husband's death his widow and children are heirs in equal shares. As long as the wife lives the estate is not distributed. The only exception to this is if she wishes to return to her family. The chief will then distribute the property and she takes her share as well as that of her youngest child, who always remains with her. The fact that boys took the name of their mother and could also inherit from her suggests that there was a degree of bilaterality in Little Namaqua society. Although bilateral kinship, according to a functionalist approach, could be seen as offering the greatest scope for adaptive choice under harsh environmental conditions, Ingold (1980) suggests rather that it stems from the character of property relations.

It is this issue which we have to consider below. Did the Namaqua adhere to private versus communal ownership of property? Schapera (1930) claimed that all forms of property were privately owned but, says Carstens (1983), he did so because he was concerned to counteract earlier accusations of a type of 'primitive communism' in operation among the Khoekhoen. Both Carstens (1983) and Wandres (1908) suggest that property was owned by the pastoral family rather than the individual. Wandres claims that no assets are the individual property of either husband or wife. Each has to ask the other before disposing of it.

One facet of ownership which needs to be considered here is that of the system of *oa* (Nama for to look for/seek) or reciprocity widely recorded among the Khoekhoen and in particular the Namaqua peoples. It extended to all items of material culture as well

as food. The Nama used the terms *magus* and *soregus*, denoting a custom which means "to give to each other" (Wandres 1908:26). My reading of the historical literature suggests that we should distinguish between this custom, which extended to friends, family and even total strangers, and the system of establishing bond-friendships ('opligtbroer) with a particular individual. This latter custom is described below. The Nama are recorded as loaning out cattle (against a half share of the increase), horses, spans of oxen, wagons, utensils, arms and bulls and rams for serving purposes. "To take payment for the loan of a thing was despicable" (ibid. 1908:23). So, while it frequently happened that people became indebted to each other, "according to the system mentioned above, all giving and lending is tantamount to making presents. Of course, people are glad if they receive back what they have lent, or, if debts are paid..."(ibid. 1908:24). The person who receives the goods has far-reaching rights in respect of the article. The duty to reciprocate a gift is unknown. "To accept a gift in reciprocation when giving a gift is considered bad manners. It is customary to give a gift in reciprocation at a later date, and it will be gladly accepted" (1908:26).

Wikar observed as early as 1779 that those Khoekhoen who he met along the Orange River "hold it to be the greatest evil to be considered mean, consequently they have everything in common and refuse one another nothing" (Mossop 1935:191). Burchell (1953:254), discussing the Corannas (Korana), says "They frequently are obliged to kill a sheep, as it were, by stealth, that they may save a portion of it for their own families; and elude those beggars, who would seat themselves around the pot without ceremony or waiting for any invitation". Some Korana cultivated corn but the majority consumed it immediately after harvest. Those who did store some were constantly beset by what he calls hangers-on "who under the claims of relationship or friendship, became such a tax on their industry as almost to dissuade them from growing another season" (ibid. 1953:254). The major impediment to individual accumulation was, therefore, this system of reciprocity. Shaw (1970:20) observed that "they will share the last morsel in their possession with one who is hungry", while Melvill (1890:6) intent on denigrating the communistic kind of life in the reserves, mentions "this system - quite a recognized one - of sharing one's food and even other kinds of property". Cornell (1985:105) remarking on the habit of cadging among the Nama of the Richtersveld, says "Tobacco was their greatest desideratum, but it was noteworthy that, greedy as they were for it,

they invariably shared everything given to them". Finally, Hoernlé (Carstens *et al.* 1987:63) comments that that "Every man has here equal chances, and equal rights with the result that none have ambition". It was for this reason, says Schapera (1930), that their economic system has been termed a sort of communism.

The system of generalised reciprocity is widely considered to be one of hallmarks of simple hunter-gatherer societies. The simplest form of reciprocity is sharing and giving and is undertaken, claims Cashdan (1985), as a means of risk reduction. According to this interpretation the hunter shares the meat of the game he has killed with all the band members in order to ensure that his own survival. In place of being an altruistic gesture, reciprocity is defined in functionalist terms as a means of buffering environmental and economic fluctuations. It is this sharing ethic which reflects the strong egalitarian nature of many hunting-gathering societies, claims Smith (1986, 1987, 1990a, b), and makes it difficult for them to accumulate stock and become herders. In chapter 4 I consider whether the San were really as egalitarian as Smith has proposed. In this section, however, I indicated that there is considerable evidence to suggest that reciprocity was also of crucial importance among the Namaqua.

The evidence presented above suggests that women exerted considerable authority over the acquisition and disposal of stock. The whole question of the inheritance of property among the Nama needs to be examined in the light of the status of women in Nama society. Carstens (1966) is particularly interested in this topic, having been made aware of the "relatively high social and economic status" enjoyed by women after his ethnographic fieldwork in the Steinkopf reserve. Hahn (1971) recorded how the woman or *taras* (see below) controlled most aspects of domestic life, thereby exerting considerable influence over the economy of the Nama. She owns the hut and cooking utensils. After her husband's death she may return with them and her youngest child to her family. She has her own cattle obtained from her parents before marriage and from her husband's kin at marriage. "She, together with other women in the household, does the milking and controls the milk supply of all the animals in the family herd, whether she owns them or not" (Carstens 1983:62). At home her husband is not allowed to take as much as a mouthful of milk from a bowl without her permission.

Nama men, on the other hand, engaged in political and legal matters, while uninitiated youths were responsible for the herding of the livestock.

Lau (1987) concurs regarding the sexual division of labour in Namaqua society but interprets this in a different way. Despite their relatively high social position, she believes that women were 'oppressed' and their work and fertility controlled by the chief and elders (Lau 1987:14). The historical records pertaining to the Little Namaqua do not support this contention; Hahn (1971:28-29) in fact records how women could lecture an unpopular chief in a "sarcastic reed-song", while young girls could ridicule an old chief for marrying a very young girl. According to Hoernlé (Carstens *et al.* 1987), women may even have played a minor role in political events as well. She remarked "it was not unusual for a senior female descendant to act as regent until a successor could take office" (1987:154). Furthermore, she also met Miriam in 1913, who was "the eldest descendant of the old chief's family and practically has the chief say in all tribal matters" (Carstens *et al.* 1987:72,84).

Much of the respect accorded women stemmed from the high esteem that men had for their sisters, in particular their eldest sister. Barnard (1980, 1987, 1988) has shown that those Khoe-speaking groups who trace descent patrilineally have as their primary genealogical referent the *father's sister* (*taras*). She was the senior female agnate and played an important role in her brother's affairs. The disintegration of the patrilineal tribal organisation of the Nama resulted in the respect-relative category reverting to the grandrelative category, a phenomenon of bilateral band societies. When this happens the brother's sister loses her control over her brother's affairs. These types of transformations "cannot be directly linked with a change in subsistence pattern as such, but may be an ultimate result of changes in group structure which themselves are dependent upon changes in subsistence" (Barnard 1988:40). Since a man's sister fell within the category respect-relative, he was not allowed to address her directly. The highest oath he could take was to swear by his sister. Nama folklore also emphasises the importance of women and in particular the eldest sister.

The particular respect which a man accorded his wife and sisters is, as Carstens (1983) correctly points out, the source of potential tension in Namaqua society. The conflict

had its "roots in competition over property or control of resources: wives not only controlled the milk supply but also brought property (e.g., cattle and household utensils) into the marriage, while sisters inherited property in competition with their brothers..." (ibid. 1983:63). There is no evidence, however, that tensions which resulted from female economic power ever led to aggressive male behaviour. The resolution of this contradiction within Namaqua society was effected through male manipulation of certain material cultural items as well as control over ritual activities which is discussed below. Women, we may presume, would have had to renegotiate their position on a day-to-day basis and they would have done so through their behaviour and material cultural items.

Although Gordon (Smith & Pheiffer 1992) recorded that there were women "priestesses" among the Little Namaqua who were involved in ritual slaughter we are not told of the social status of these priestesses in society. Elderly women have always taken an active part during the girl's initiation ceremony, during the marriage ceremony and as midwives during childbirth. Furthermore, among contemporary Nama speakers, women may also massage sick individuals and administer herbal medicines, but they are not known to be diviners. That women enjoyed considerable respect in ritual ceremonies is not disputed, but their position certainly did not rival that of men.

In terms of the organisation of labour in Namaqua society, it would seem that adult men were primarily concerned with discussing and resolving issues of a political nature, hunting and trading, as well as warfare when this occurred. Uninitiated youths were responsible for herding and watering the stock, while women undertook the milking. Women also undertook all the domestic chores, such as collecting firewood, plant foods and water, as well as manufacturing clay pots, the mats for the huts, etc. It was the women who prepared sour milk and butter and also worked the skins of the slaughtered stock. The ritual consumption of meat among the Little Namaqua appears to have taken place almost on a daily basis. It would appear that small stock were frequently slaughtered for various ceremonial occasions, but that only certain members of the family could partake of the meat. The allocation of the meat was therefore prescribed along the ideological lines discussed below. Women, it would seem, contributed substantially to the smooth running of the economy, but it was the men who were engaged in prestige activities such as politics and trade. It is only with respect to the

milking of the livestock, as well as the allocation of the products of the herds, that an anomally exists. In this chapter I consider why men permited women to undertake those functions more commonly associated with men in black farming societies.

The appropriation of a surplus

Herds and flocks in pastoral societies are easily decimated. As Ingold (1980:216) points out "it is pastoralism rather than hunting that is afflicted by chronic instability, resulting from the periodic irruption not of human but of animal numbers"; "the pastoralist knowingly presides over a looming ecological catastrophe" (ibid. 1980:78); and "it is the very imminence of disaster that motivates pastoral accumulation in the first place" (ibid. 1980:79). Every household therefore attempts to guarantee its own future by accumulating surplus livestock. It is the unequal accumulation of stock, however, which formed one of the major contradictions in Namaqua society as in all pastoralist societies. According to Bonte (1981:41) "the contradiction between the unequal accumulation of livestock among the autonomous domestic groups and the equal acess of these groups to collective resources [determines] the laws of transformation of the productive system".

Labour, or the lack of it, presents a problem to all pastoralist societies. Among many East African pastoralist societies labour is divided on the basis of age, namely, the age-set organisation. In Namaqua society, however, there is evidence that while young uninitiated boys did assist in herding, the system of age-sets did not occur during the historical period. I have shown that several domestic units (or a camp) co-operated during the winter months, while in the summer larger social groupings were formed in order to clean wells or defend the territory if this became necessary. However, when the herds of a particular domestic group became so large that it no longer had sufficient labour to pasture or water the animals effectively then herders had to look to alternative forms of labour. Furthermore, among many pastoralist groups "the supply of female labour may place an immediate constraint on the size of the family herd" (Ingold 1980:182). Black-Michaud (1986) has observed that a woman is only able to milk 100 ewes per day which implies that domestic groups with only few adult females would also need to look outside for other forms of labour.

Surplus livestock was not hoarded by the household, but was used to create new social relationships, thereby ensuring the reproduction of the community as a whole. A wealthy owner could hire out some of his breeding stock to a less wealthy individual against half the share of the increase; in fact, the ideal of social equality probably demanded that he do so. Wealthy pastoralists do not want to draw attention to themselves by excessive opulence; instead they use their surplus stock to create networks of stock associations. This egalitarian ideal masks the contradictions which arise when a surplus stock generates unequal status and disparities in political power. I mentioned earlier that the wealthy herder indicates his privileged position by the application of fat to his person, rather than by the actual display of livestock (Hahn 1971:17).

A wealthy herder had a number of options which he could follow when his herd became too large to manage; he could engage a client herdsman, who could be a propertyless bachelor or, alternatively, he could loan excess stock to a kinsman who had insufficient for his own needs. There are several references in the historical accounts of individuals (both Khoekhoen and San) who stood in positions of servitude with respect to others. Wandres (1908:25) observed, "the servant (*/gab*) enters the service of his master by verbal agreement, voluntarily and for life and he considers himself part of the family". A servant who stole from his master had to atone for his behaviour but was not dismissed. Moreover, a faithful servant could marry the daughter of his master and in effect become an adoptive son. Mechanisms appear to have existed whereby servants could eventually become incorporated into the greater herder society. Goldschmidt (1976:24-25) has observed that "Such exploitation of the labor of others does not establish a social class system, however, inasmuch as the workers tend to be part of the owner's household". With respect to the employment of an assistant or client, Ingold (1980:190) remarks "the poor herdsman who enters the service of a wealthy owner is a feature of pastoral societies in which animals do not constitute objects of long-term reciprocal transactions".

Bond friendships or contractual arrangements between two individuals were called '*kan sa hoega*' or 'making brothers to make helpers' (Smith & Pheiffer 1992). It involved ritual slaughter called *tan* or 'lifting a brother'; obviously, this is a translation of the

'opligtbroer' referred to by Wikar (Mossop 1935:39). Wikar related how he became the bond friend of "a patriarchal old chief of the Bushmen"; after an exchange of cattle, they were required always to assist each other. According to Gordon (Smith & Pheiffer 1992), a cow was given by each to his mother. He confirms that the ceremony could also take place between two women; and Wikar recorded that it also occurred between a man and a woman (in this case a Bushwoman and a Namaqua man) after an exchange of buchu and tobacco (Mossop 1935:63). Schapera (1930) unfortunately conflated "soregus" with the system of bond friendship (make mates), perhaps because the Gordon material had not yet been published. In my opinion bond friendship differed from the more generalised custom of helping ones neighbours (*soregus/magus*) described above. Although it is not clear from the literature, I would assume that bond friends were established for reasons beyond the purely economic.

Cultural ecologists claim that the function of loaning out livestock among pastoralists, as in the case of sharing in hunter-gatherer society, was to buffer the domestic unit against environmental disasters. However, Ingold (1980) avers that if there were a marked famine/drought/disease, then this system of calling in the livestock one had previously loaned through stock associations would not operate. The surplus population could not be carried as the remaining herds would fall beneath the point of recovery. In my opinion, the loaning out of stock was not undertaken primarily as a form of social security against possible drought or disease. I am more inclined to favour the proposal that the loaning out of stock was a means of building up a network of alliances or relationships. A person with many such networks of mutual dependency could exert political influence and, with sufficient support, become captain of the kraal. It is obviously to the stock owner's benefit to parcel out his surplus stock "in long-term reciprocal transactions" (Ingold 1980:190) rather than to make use of stock assistants or clients. It therefore makes better economic and political sense to suggest that the Khoekhoen would have established stock alliances with members of their own camp or clan rather than have employed 'outsiders' like the 'souqua'.

I argue that stock associations and stock assistants (clientship) are mutually exclusive solutions to the surplus accumulation of stock. We need to ask ourselves why Little Namaqua pastoralists would have made use of 'soaqua' clients when a system of stock

associations existed among them. It is possible, as I have pointed out above that 'soaqua' clients may have been employed during periods when the social value of livestock decreased in importance, in other words when they became of less significance in the formation of political alliances or "long-term reciprocal transactions" (Ingold 1980:190). Furthermore, according to segmentary lineage theory, labour shortages often emerge during periods of territorial expansion, when marked competition between lineages may result in a reduction in stock associations. In situations of competition between lineages, Burnham (1976:354) has shown that clients are generally absorbed or assimilated, leading to a blurring of "class divisions in favour of competition for demographic strength between opposing lineages".

Territorial expansion among Khoekhoen groups could therefore have been characterised by increasing use of hunter-gatherer clients who may have become absorbed into Khoekhoen society. It has been observed that 'foreign elements' are incorporated into pastoralist lineages especially during periods of territorial expansion due to economic growth. Incorporation is more easily accomplished if the tribal groupings are spread over a wide territory and there is little contact between them. Tensions which result from unequal accumulation of livestock are "exported to the periphery of the system through the opening of new pastures and the redistribution of opportunities for acquisition of stock" (Bonte 1979:227). Seventeenth and eighteenth century Namaqua groups clearly did make use of 'soaqua' clients, suggesting that the traditional option of stock associations was not operating for some reason. It would appear that the system of utilising clients may have fluctuated through time according to the internal workings of Namaqua social structure. Furthermore, increasing trade in excess stock for metal items, etc., would have significantly reduced the amount of surplus stock available within the society for stock associations. This issue is discussed in greater detail in the following chapter.

To summarise: the increasing inequality between pastoral producers as a result of unequal accumulation and the "necessary equal access of each producer to the collectively held resources" (Bonte 1979:227) leads to contradictions which are made manifest, claims Bonte, in the development of stock associations and clientship relations. According to him "Circulation of livestock is seen as determining the entire

reproduction of all the domestic units" (1977:182). Contradictions which emerge due to unequal accumulation are resolved by the continuous redistribution of livestock. It therefore plays an important role in the reproduction of the communal form of production. A surplus is thus necessary for the reproduction of the community, but at the same time contains the seeds which lead to the transformation of these societies.

Ideology

According to critical theory, ideology is the mechanism used by society to articulate the disjunction between the social relations and the way in which they are experienced. According to Marx, claims Rigby (1985:16), "the *real* nature of the community relations of production, ..., and hence the *conditions* for the reproduction of the social formation, [are] embedded essentially in ideological institutions such as those of kinship, age-set organisation, and ritual". Rigby (1985:18) is therefore at odds with Bonte's interpretaton of "cattle fetishism", claiming that "religious ideals and practices are subsumed by the age-set and kinship organisations, not the other way around". I argue below that male manipulation of ritual and ceremony in Little Namaqua society provided the means by which they attempted to maintain and resist social change. Contradictions which may arise between social groups (i.e., between the sexes or different age groups), or between the forces and the relations of production, are generally masked by ideology. Ideology forms part of the superstructure. Its function, claim the structural Marxists, is to legitimate the existing order, mediate contradictions in the base and mystify the sources of exploitation and inequality in the system (Ortner 1984:140).

This interpretation of ideology, claims Ortner, is decidedly functionalist, as it attempts to show that myth, ritual, taboo, etc., are all there to uphold the status quo. The belief system is seen as a predictable response of the adaptive system; in other words, materialists see "style, symbolism, ideology and cultural meaning as conferring adaptive advantage" (Hodder 1986:20). According to this passive view of ideology, individuals are controlled by rituals and do not appear to be actively manipulating negotiating ideologies. It is for this reason that I follow Hodder (1982a), who maintains that

domination occurs daily in each action negotiated and renegotiated between power groups in an dynamic and changing framework of meaning. To quote him, "material culture reinforces, emphasises or masks certain aspects of information flow as part of ideologies which support, justify, legitimate or disrupt the adaptive strategies of groups within societies. An adequate notion of the role of material culture in adaptation must integrate ideologies" (Hodder 1982a:125).

My review of the beliefs and legends of the Namaqua is of necessity very brief and is focussed on those issues which suggest possible conflict. The Namaqua believe in two supernatural beings, *Tsui//goab* and *//Gaunab* representing repectively good and evil, this being confirmed by Gordon as early as 1779 (Smith & Pheiffer 1992). Hahn (1971:86) is of the opinion that the belief in //Gaunab, the evil spirit, is the older of the two. During the rain ceremony songs were addressed to *Tsui//goab*, who was also regarded as a sorceror of considerable skill. In addition to these two figures, there was also *Heitsi Eibib*, who lived on earth rather than in the heavens. He was a sort of common ancestral hero, a trickster who brought good luck. According to Lau (1987), however, he is not mentioned in early accounts of the Great Namaqua and she is of the opinion that he gained prominence at a later date. Carstens (1975:83) concurs, suggesting that "Heitsi Eibib's supernatural existence emerged with the growth of private property and the institutionalisation of inequality between people". Furthermore he also discussess the role of another character, namely the */nas*, a type of female hare. This hare had considerable supernatural abilities but could be controlled only by women, generally old women. Carstens (1975:90) ascribes the recent emergence of the */nas* to "compensate low-status adults for their lack of power, and to reinforce the authority of those placed in situations where they cannot effectively control their spouses". The relatively weak power of women in the contemporary period is therefore reflected in the greater powers of the */nas*. One can at present only speculate about the connections between the */nas*, the hare in the myth on the origin of death, and the taboo against initiated men eating hare. This is clearly an area for further study.

There is no historical evidence that the Little Namaqua revered their ancestors or attempted to placate either them or the supernatural beings with sacrificial offerings. The only account (Smith & Pheiffer 1992) relating to beliefs concerning the dead by

Gordon indicates that they apparently became spirits called *Gauwasi* and sometimes appeared to individuals during troubled dreams.

Rain ceremonies: The similarities between the rain-making ceremonies of the Korana and the San Lewis-Williams (1981) ascribes to contact as a result of the close proximity in which they lived with each other. More recently, Solomon (1989:57) has compared the /Xam rain ceremony with that of the Nama recorded by Hoernlé (1922) "in which an important parallel of rain, birth and fertility is clear". A pregnant animal was slaughtered on the banks of a stream and the uterus pierced over a fire so that the uterine fluid flowed through the fire and into the stream. At the same time milk and fat were thrown into the fire so that clouds of smoke ascended to the sky and the people requested that plentiful rain would fall.

One other point about rain ceremonies is that Lewis-Williams (1981:105), discussing the bovine characteristics of the /Xam rain animal, suggests "it is possible that in some cases, especially when the San were in contact with herders, that this procedure may actually have been performed with such an animal". Where possible, hunter-gatherers would have made use of cattle in their rain-making ceremonies (Schmidt 1979:203). I raise this point because the transformation of a hunter-gatherer society to one based on herding may well have been initiated by the desire to have the necessary animals for ritual slaughter. It is therefore interesting to note that Engelbrect (1936:175) in his discussion of the Korana rain ceremony, remarks that fat was burnt as "It was the pleasant smell of the fat which had to ascend to heaven". It was the odour of the fat which was especially significant, as it still is among the !Kung; "Fat is considered by the !Kung to have a pleasing odour, especially when it is cooking..." (Lewis-Williams 1981:51) and "Odour, in !Kung thought, is the medium for the transference of power". Solomon (1989) also remarks on the linkage of blood and water in both hunter-gatherer and Khoekhoen rain ceremonies as well as in their female puberty rites. Both Nama and /Xam consider "The pregnant cow, the uterine liquid, milk as well as blood, represent the fertility which the people expect from the rain" (Schmidt 1979:204).

According to Von Wielligh (1921), the /Xam believed that the snake was the child of the rain bull (Xoro) and the waters (Khwa). There is an extensive literature on the

Namaqua superstition regarding a large snake which lives at all springs and also in the Orange River, and comparisons between this belief and that of hunter-gatherers (Von Wielligh 1921) regarding snakes would fill several more pages (see Schmidt 1979). Among both the Zhu (Wilmsen 1989) and the Nama killing a snake near a water hole is considered to bring exceptional bad luck as snakes are associated with rain. The point I wish to make is that in early folklore the snake is frequently described as being female; however Carstens (1975) found that contemporary tales report that the snake resembles a very handsome man. He is hated by all men but women are reported to fall in love with him. According to Carstens, this belief provides an outlet for male aggression. However, research in other parts of the world into myths revolving around snakes suggest that serpents frequently represent phallic symbols utilised to present male dominance (Knight 1983). The change from a belief in female snakes to male snakes is one further example of the increasing dominance exerted by men in Namaqua society.

Folklore: Our most important source of Namaqua folklore must surely be that collected by Rev. Kronlein, Rhenish Missionary at Beerseba, Great Namaqualand, between 1861-3 (Bleek 1864). These fables of animals with human attributes are very reminiscent of animal fables from other parts of the world. Bleek (1864) was of the opinion, however, that not all of them could be ascribed to European contact. We, unfortunately, have no information regarding the context in which these fables were produced. Were these tales recounted by women to their children or were they more widely incorporated into Namaqua social life? Clearly, these tales are ideological products of Namaqua society rather than an attempt to portray realistic events (Solomon 1989). According to Moore (1986), the metaphors used in fables or tales should be analysed as symbols of power used by the dominant social group to impose their will on their subordinates. There is no mention of women in the origin myth related at the beginning of chapter 1; however, a second myth recounted at the beginning of this chapter explicitly states that it was a woman (of the Great Namaqua) who was responsible for the formation of the Little Namaqua. Her marriage to a man (of unknown origin) indicates that the Namaqua acknowledged the importance of women in establishing contacts and relations with other groups. In this case she in fact became the "mother" of the new nation.

Three fables in the Bleek collection are of particular interest in the light of the observations made above. They are concerned with Nama women who are threatened with danger in the form of husbands, strange men and male animals. These fables are symbolic attempts to show men up as aggressors while women are portrayed, not as passive victims of this aggression, but as individuals actively taking control of their situation. In addition the folklore hints that women had more real power in everyday life than is apparent from the cursory observations made by early European travellers through the region. Very significant, however, is the poorly developed role of livestock in Nama lore and mythology. There would appear to be few, if any, praise songs involving livestock, such as are commonly encountered in East African pastoralist societies. Men are not compared to bulls nor are women equated with fertile cattle. In fact, the collection of tales presented by Kronlein contains songs relating the qualities of the baboon, zebra, giraffe, hyaena and elephant, but there are none describing the beauty of cattle or sheep. This is surely remarkable in a pastoralist community.

Ceremonies and rites of transition: I do not attempt to present an overview of all Namaqua ceremonies or rites of passage here, but concentrate on selected rituals in order to illustrate two things. The first is the way in which certain ceremonies were actively employed in structuring within-group relations. The second is the remarkable similarity between Namaqua and hunter-gatherer rituals and ideology; the /Xam being taken as an example of the latter group. The importance of this point is discussed in chapter 4.

Wikar (Mossop 1935), Gordon (Smith & Pheiffer 1992) and Kolbe (1731) all discuss the 'andersmaaken' (alteration or metamorphosis) ceremonies with respect to the Khoekhoen and both Gordon and Wikar list various stages in an individual's life which would be celebrated with ceremonial killing. It was Hoernlé (1925), however, who first identified the various Namaqua rituals as rites of passage. They follow a more or less standard pattern: the subject is removed from his social environment (separation); while waiting to enter the next stage of the life cycle he is prepared for his new position (transition); and, finally, he is accepted into the next stage (incorporation). During the second stage (transition) the individual is often considered to be in an ambiguous position and may be regarded as unclean, polluting, sexless or bisexual. He is also

completely subjected to the authority of the elders. According to Hoernlé (1918), people in this stage are extremely dangerous to others and are said to be *!nau.*

Girl's Initiation Ceremony: The reason I focus on this ceremony is because it is the only ritual which was still practised within living memory by descendants of the Namaqua peoples in the Richtersveld. Elderly informants presented accounts which do not differ substantially from those collected by Gordon in 1779 (Smith & Pheiffer 1992) or Hoernlé in 1913. On experiencing her first period a young girl is placed in the kharu-oms (a small division within the mat house). She is ritually cleansed of 'body dirt' and anointed with fat and sweet smelling herbs. She may be covered with a kaross. Her meat is cooked by an elderly woman after being specially slaughtered. It is important that she should get fat with a shining skin. She should not speak loudly nor come into contact with cold water or the fire, both of which are *!nau.* At the end of her period of seclusion she is reintroduced to the community. An ewe is ritually slaughtered, she is dressed in her best clothes, is given presents by the womenfolk and her face is painted with ground pigments in various patterns. The young boys then come into the hut and she rubs their testicles with a powder puff covered in sweet smelling herbs. Contemporary ethnographic accounts from among the Nama of Namibia indicate that the pelvic bones of the goat eaten at the end of the initiation ceremony for girls are strewn with red ochre and hung over her sleeping place. "It is supposed to prevent disarticulation of the pelvis during childbirth" (Rudner 1982:149). This custom was also recorded by Hoernlé (1918) and Engelbrecht (1936). The girl is then 'danced' out of her hut and joins the celebrations, which often last the entire night. An elderly woman then accompanies her while she is reintroduced to milking, collecting water and gathering veldkos. The Korana observed that "the day after such a girl had come out of her hut it was sure to rain and there would be plenty in the land" (Maingard 1932:66). It is interesting in this regard to note that the droughts which have affected part of Namaqualand in recent years have been ascribed by Hoff's informants to the fact that menstruating women are going out to work and not staying at home as they should, as well as to the fact that young girls are no longer undergoing puberty ceremonies (Hoff 1983:11).

There are a number of remarkable similarities between this ceremony and that of girl's puberty rites observed among the /Xam (Lewis-Williams 1981), as well as the //Hai-om (Schapera 1930) to which the reader is referred. I believe that the similarities in the rites between these two groups are not merely fortuitous. There are two possible explanations for this. According to the first, the hunter-gatherer groups and the Khoekhoen shared a similar cognitive worldview as a result of their common origin some two thousand years ago, the other is that one society may have borrowed these concepts from the other.

Knight (1983), in his review of Australian aboriginal myths, discusses a view which holds that women are the source of immense potential power. Men fear women's potency in reproduction and therefore attempt to alienate and transfer this power to the community of men. One universal male myth is that menstruating women are impure and that if these impurities are not carefully controlled (by a host of taboos) chaos will be unleashed. The host of injunctions above regarding menstruating girls strongly suggests that the potential (and actual) power of women in Nama society did indeed pose a threat to the men and that the myth of male dominance was only ensured by strict application of taboos surrounding women.

The *dro* or "man-making" ceremony: uninitiated youths assisted with the herding of livestock and the digging of wells; some of them, claims Lau (1987), were long past early adolescence but were kept in a position of subordination by the chiefs and elders who ultimately wielded control over matrimony (women's work and fertility). I deal with the issue of chiefly control over matrimony in the next section; however, it is sufficient to say that Lau considers the conflict in Great Namaqua society to have been between the elders and the uninitiated youth. The ethnographic material discussed below indicates that this was not the case among the Little Namaqua or the Korana.

Both Gordon and Wikar made some observations on male initiation ceremonies in 1779. Gordon (Raper & Boucher 1988) observed that urination by the older men took place, while Wikar (Mossop 1935) remarked that a young Hottentot had to be initiated into manhood or he could not join in the discussions of the men or, according to Gordon, eat in the company of men (we may take this to refer to ceremonial occasions). Wikar

described the ceremony of the Eynikkoas (Einiqua) as involving ritual cleansing, anointing with fat and being urinated upon by the older men. This description is similar to that made by Thunberg (Forbes 1986), who observed that the omentum of a slaughtered animal was then tied around the initiate's neck (confirmed by Gordon). Tindall (1959) further added to this by asserting that the youth was seized from his hut and stripped of his clothing before the ceremony commenced. Campbell (1815) documented that a separate hut was constructed for the youth and that incisions were made on his chest.

Engelbrecht (1936) provided a comprehensive description of the Korana rite but cautioned that he believed that the ceremony had been influenced by the nearby Tswana. The youth is not told of the ceremony beforehand but is surprised and taken by the old men and his maternal uncle to the cattle kraal where a special hut is built for him. The candidate is stripped of his clothing and dressed in the 'hindkaross' (back apron) of a little girl. His ambiguous gender position is further stressed by placing brass rings on his legs (men wear rings only on their arms). Cattle and small stock are ceremonially killed but only the men are allowed to eat of these. His body is rubbed with fat and red ochre. He may only drink only cows milk. At the end of his period of seclusion, he is scarified, his head anointed with fat and blinkklip (specularite) and he is given a list of injunctions to follow: do not murder, do not commit adultery, avoid the meat of hare, etc. The next day, still in woman's clothing, he drives the cattle out of the kraal. Then he goes and shoots game, which may only be eaten by the men and finally he is given a new set of clothing by his maternal uncle.

According to Schapera (1930:284) "the *doro* men form a distinct social group within the community"; furthermore he believes the evidence suggests an "alignment of the community with the men on the one side, and the women and children, including uninitiated boys, on the other side". An important point to make here is that boys appear to have been initiated individually and not in groups with other youths of a similar age as is common among East African pastoralists. This is strong evidence in support of my contention that male age-sets were of little importance among the Little Namaqua. The historical accounts clearly indicate that the rites, described above, were undertaken so that the youth could take part in the discussions of the men. Should he

disobey these injunctions, for example by eating the meat of a hare, then "in future his occupation is herding sheep and goats which are grazed in one flock. He is henceforth scorned by females and considered a slave" (Tindall 1959:28). The symbolic act of dressing like a girl emphasises the sexual ambiguity of the youth during the initiation period. It was only by adhering to certain principles of manhood that he was able to escape classification with the women. During this rite the tensions between men and women would appear to have been ritually re-enacted, with stress placed on the necessity of conformity to male ideals.

Both Wikar (Mossop 1935) and Engelbrecht (1936) mention the importance of hunting during this ceremony, while Hoernlé (Carstens 1985:62) commented on the fact that puberty ceremonies for boys appear to have lapsed when big game hunting ceased to be possible and with it the necessary test of manly skill and courage. Manhood was apparently not linked to the ownership of cattle but rather to hunting, warfare and political discussions. Raiding and warefare being methods by which they asserted their masculinity. While both the Khoekhoen and hunter-gatherer male puberty ceremonies tested male courage through the hunting of game, there are no other similarities between the rites of these groups. Nevertheless, it is interesting to note that the /Xam also stressed female rather than male initiation ceremonies, Solomon (1989) observing that there are sixteen narratives in the Bleek records dealing with female initiation while tales of male initiation are rare or absent.

Anthropologists such as Bettelheim (1962) have noted that in male initiation ceremonies around the world there was an attempt to imitiate female behaviour. Female ceremonies among the Namaqua, as I have shown, are linked to the theme of pollution and danger posed by menstruation. Is it perhaps possible that the custom of urinating upon the youths among the Khoekhoen was undertaken so that they were also polluted (like the menstruating girl) and therefore needed to be ritually cleansed? It is significant that the Korana emphasised the ambiguous sexual position of the initiate during the second stage of the ritual by dressing him in women's clothing. Furthermore the reference to scarification also suggests that the letting of blood in male rites may have been undertaken as a substitution or imitation of menstruation. In male puberty rites,

Bettelheim (1962) notes, the bleeding caused by circumcision or subincision is an attempt to ritually recreate the menstrual bleeding of females.

Concepts of pollution, says Douglas (1966), are used "to express a view of the social order" and the maintenance of beliefs and practices relating to pollution are meant to underscore and reaffirm the rightful order in the face of impending chaos (female insubordination?). Furthermore, where pollution beliefs are significant we usually also note that social boundaries (such as between men and women) are clearly marked (Thornton 1980:145). Although the material is scanty, and despite the political power wielded by men, I would submit that Namaqua men manipulated ritual activities in order to socialize young boys into assuming a certain gender identity. They did so because men unconsciously regarded femaleness as more powerful that maleness. The ritual pollution of the youth, the imitation of female dress and female menstruation all indicate an attempt by men to appropriate female power.

Marriage: There are only a few points which I want to make with respect to the rituals surrounding the Namaqua marriage. The prospective bride was always consulted about her future husband; there is no evidence that she was coerced into accepting a choice made by her elders (Mossop 1935; Smith & Pheiffer 1992). Nor is there any proof that marriages were arranged with the view to contracting advantageous economic or social alliances, although this is certainly likely to have motivated them.

According to Lau (1987), it was the male family heads and the council of elders who 'loaned' the young, initiated youth his cattle and thereby permitted him to marry and achieve a measure of independence. I cannot agree with this interpretation. By all accounts (Smith & Pheiffer 1992), marriage was a transaction undertaken between two families and did not depend on the approval or otherwise of the chief. Nor is there any evidence that livestock was 'loaned' to the young groom. It was his family who provided the livestock but we may deduce from an earlier section that he would be receiving his inheritance in advance. Carstens (1983:66) has shown that "premortem inheritance while their children are establishing themselves as adults" was preferred among the Nama. Premortem inheritance also occurs among the Zhu, and Wilmsen (1989) contends that it is a structural characteristic common to all Khoisan. The mother

of the bride received a cow (*aba gomas*) from her new son-in-law, the progeny to be used for her own children, claimed Engelbrecht (1936). Livestock was presented by both parties and in my opinion this invalidates claims of bridewealth "paid in order to compensate for the loss of the reproductive potential of a woman when she moved to the family of her husband" (Morris 1990:12). We need to move away from what Rigby (1985) calls the "bourgeois concepts" of bridewealth, namely the 'buying and selling of women'. Furthermore, I have already demonstrated in an earlier section that the Namaqua may well have considered marriage to be the exchange of women for men and vice versa.

DISCUSSION

This chapter draws together various strands of information, historical and ethnographic, relating to the Little Namaqua. My perspective is explicitly diachronic as my aim is to illustrate the complex and dynamic process of Khoekhoen and hunter-gatherer interaction in Namaqualand during the 17th, 18th and 19th centuries. Little Namaqua society did not remain static during this period but underwent profound structural changes. I do not consider the present inhabitants of the reserves to be 'remnants' of the Khoekhoen but attempt to accord them their own history. By examining three centuries of Namaqua history we are placed in a better position to ask the most appropriate questions of the the archaeological record presented in chapter 5.

According to the historical records, considerable re-alignment of social groupings took place during the last three hundred years with the 'soaqua', and later the Bosjesmans (Bushmen), oscillating between defenceless dependants and dangerous foes according to political circumstances. The complete decline of Little Namaqua society was effected within a century of the arrival of van Riebeeck, the first Dutch governor of the Cape. The ravages of smallpox, attacks by Bosjesman groups, the encroachment of Dutch Trekboers on their lands, but, most importantly, their trade in surplus stock for trade items rather than the maintenance of stock associations soon led to the collapse of their economy.

With respect to their social organisation the combination of patrilineal and matrilineal principles of descent means "that the complex cross-cutting series of roles and relationships centred on an individual are subject to frequent reinterpretations" (Hodder 1982a:182). Since each individual could claim social relations through both father (patrilineal clan) and mother (great name), he/she also had access to the resources and assistance of both groups. Inheritance through male and female lines and the system of cross-sex descent probably promoted a certain degree of bilaterality in their society which was outwardly expressed in the weakening of residential location; e.g. Carstens (1966) observed a significantly high proportion of uxorilocal residence among the Nama of the Richtersveld.

I would argue that women's enhanced status in Namaqua society derived from their involvement with the domestic stock. The considerable authority wielded by women over the domestic economy plus the fact that they owned stock and could also inherit stock in competition with their brothers was a potential source of considerable stress in Namaqua society. Conflict was avoided by placing older sisters within a respect relative category and possible female insubordination was held in check by male control over the most significant ritual activities. Of course, we need to ask ourselves whether women exerted 'real' control over the domestic economy or whether men 'allowed' this because it was in their own interests. The importance of women in Namaqua folklore and the aggression shown them by men (husbands and strangers) suggests that a tenuous political struggle was being played out between the sexes and that myths and rituals were re-enacting hidden tensions.

Gender relations may not have been the only area of tension in Namaqua society; tensions may also have arisen periodically between uninitiated youths and adult males or equally well between clans or lineages. While there is less historical information on this for the colonial era we need nevertheless to examine archaeological data with this in mind. I have also shown that further contradictions emerged within Namaqua society through the pastoralist ideal of egalitarianism. An individual could become chief only by amassing large herds and flocks, but once in a position of authority had to present a generous front by assisting the poorer members of the clan. In becoming a patron he

would have acquired prestige but inevitably this system would have resulted in his own impoverishment.

In my review of Namaqua supernatural beliefs and their rites of transition I have emphasised two issues. Firstly, the significant power of women in Namaqua society, as illustrated in their economy, folklore and rites. Ritual, as Lincoln (1989:75) says, plays an active role "in the construction, maintenance, and modification of the borders, structures, and hierarchic relations that characterize and constitute society". Secondly, I have also referred repeatedly to the similarities between /Xam and Nama ideology and ritual. Ceremonies and rituals may also be significant 'tribal' symbols actively structuring group membership in opposition to one another. This issue is discussed in greater detail in chapter 4.

The introduction of agriculture and wage employment during the nineteenth century upset the balance of power within Namaqua society. The practice of agriculture has tended to reinforce patrilineal ties through the 'ownership' of arable land in the male line. Increasing male authority is evident in changes in both settlement layout (discussed in the next chapter) and supernatural beliefs. I believe that the retention of female initiation ceremonies in areas such as the Richtersveld (when the equivalent male ceremonies disappeared more than a century ago) suggests that women have continued to support an ideology which denies changes to the social order. With respect to items of material culture, I show in the next chapter that they were used in active manner to negotiate power relations between groups within the society.

3. CONTEXTUAL ARCHAEOLOGY AND MATERIAL CULTURE

This thesis has been structured along the lines of Hodder's (1982a) symbolic postprocessual approach (Watson & Fotiadas 1990). He advocates a combination of symbolism, structuralism, structural Marxism and Practice theory. He stresses the importance of the individual, who he regards as "a skilled and fully cognizant agent not only constrained by the rules of society (its structures) but also enabled by them to fulfill himself through his own actions" (Earle & Preucel 1987:505-6). Hodder believes that "all material culture is both ideal and material in the sense that it is both meaningfully constituted and socially (including economically) strategic" (Hodder in Earle & Preucel 1987:517). "Ideas are themselves the 'real' resources used in the negotiation of power; and material resources are themselves parts of the ideological apparatus" (Hodder 1986:71).

Material culture, then, is "an important force in the regeneration of ideology and power" (Hodder quoted in Hall 1985:14). All material culture carries symbols of importance in power relations. For this reason, says Hall (1987:5), "any artefact may signifiy a complex set of power relations". Thus an item acquires its meaning only as a consequence of its use in society, in other words, how it is manipulated in negotiations between different interest groups. Just as one may manipulate ethnic identity, so too, may ethnic 'identifiers' be manipulated, depending on the social context. It follows that the meaning of an item can become inverted by its use in another context (Hodder 1987:444). It is because material culture is actively manipulated in social strategies to express (and structure) within- and between-group identity that the postprocessual archaeologists are attempting to establish social relations from material cultural remains. While a great deal of scepticism has been expressed about the feasibility of this approach (Kent 1987; Watson & Fotiadas 1990), it offers the potential of moving beyond environmental and economic concerns toward the "direction of intracultural meaning (ideology, social action and cognition)" (Watson & Fotiadas 1990:620).

MATERIAL CULTURE AND LITTLE NAMAQUA SOCIAL RELATIONS

The duties of the Namaqua men included providing the poles for the mat houses, making the ostrich bone awls for stitching the reed mats, making bambus (the wooden milk vessel), hunting, herding and political matters. The women built the hut, sewed the mats, made the ropes, gathered plant foods, collected firewood and water, made the food and cleaned the household as well as milking the cattle. Not infrequently they cared for the livestock, too; Bleek (1857:207) observing that the cattle were not of all-absorbing concern to Namaqua men; they frequently left them with the women while they went off for days on end to hunt.

I have postulated that female control over certain aspects of the domestic economy placed women in a position of considerable authority within the society. That they perceived this position to generate certain tensions within the society is reflected in the fables referred to in chapter 2. In my opinion, the negotiation of power between the sexes was re-enacted on a daily basis through the use of various items of material culture. Not only is material culture manipulated by age, sex and status groups within societies (Hodder 1982a) but some cultural traits will also be aimed at structuring between-group relations. So certain artefact types are held back from expressing within-group interaction because they are used to support between-group boundaries. Each material culture item must therefore be evaluated within its particular context. Below I examine Namaqua material culture items and attempt to relate their use to gender conflict, while in the following chapter I evaluate the possibilty that they were used to signal inter-group boundedness or ethnicity.

Settlement

Moore (1986) has shown that the ordering of space in settlements represents such things as divisions by age, sex or position in the relations of production. These systems of classification contribute to the reproduction of the power relations of which they are a product (Moore 1986:88). Webley (1982, 1984, 1986) has provided detailed accounts of contemporary settlements in the Leliefontein Reserve. One element, the cooking shelter (kookskerm) appears to have no historical antecedents. The reason for this, I

would submit, is rooted in the changing use of domestic space during the nineteenth century, as documented by Scott and Deetz (1990). The emergence of a kitchen, separate from the main dwelling house, among white settlers during the nineteenth century has been attributed to a desire to escape flies,the stifling heat of the hearth; and, more importantly, to maintain both a social and a physical separation between master and employee. Dutch trekboers living in Namaqualand during the nineteenth century are known to have lived in mat houses, like those of their Khoekhoen employees, but they all had separate cooking shelters (Conradie 1909). I postulate that their servants emulated this settlement arrangement when they returned to their homes in the reserves. In my opinion, the emergence of a separate cooking shelter is merely a nineteenth century adaptation by Namaqua peoples of a European trend and does not constitute a pre-colonial concept. (This does not mean that I reject the pre-colonial existence of informal shelters made of a few poles and a single mat: to the contrary, historical accounts suggest that all sections of the Khoisan peoples made use of this.)

The adoption of a separate cooking area not only reflected but was also actively engaged in structuring the changing social position of the sexes during the nineteenth century. Carstens (1966) has suggested that the two separate structures on the werf reflected greater sexual division in Namaqua society. He observed men discussing political issues in the hut (private domain) while women prepared food in the cooking shelter (public domain). All forms of entertainment (even all-night beer parties) still take place in the cooking shelter. The separation of the hearth from the living area which occurred during the nineteenth century may be linked to the rising authority of men and their appropriation of the considerable authority wielded by women in the pre-colonial period. The changing position of the sexes during the nineteenth century resulted from the advent of agriculture, first introduced by Shaw (1970) in 1816. Arable plots of land were owned by men and inherited in the male line (Carstens 1966). Furthermore when 'burgers' were registered as members of a specific reserve by the missionaries it was the male head of the household who was listed. In other words, we may presume that the missionaries had no small part to play in bolstering the position of men *vis-à-vis* the women. Finally, the discovery and mining of copper during the second half of the nineteenth century meant that many men left the reserves to take up

wage employment which also placed them in a position of considerable financial power with respect to the women who were obliged to remain behind to raise the children.

In chapter 2 I described how women owned the huts and were considered to be the head in the house. With respect to the division of space within the hut itself, Hahn (1971:19) has shown that the woman occupied the right side of the house and the right side of the husband. She also slept closer to the east, or chief door. Haacke (1982) observed that the children occupied the left side or the area underneath the 'stage'. The stage (*!has*) at the back of the hut consisted of four forked poles and some horizontal beams on which personal possessions and food were stored (Haacke 1982:86). Female control over the huts has meant that women are always in the position to deny men access should they need to do so.

Dress

Descriptions of Khoekhoen dress are found in Alexander (1838), Barrow (1806), Burchell (1953), Le Vaillant (Forbes 1973), Thunberg (Forbes 1986) and Shaw (1970) among others. I shall briefly describe male and female garb, basing my review on Shaw (1970) who was a missionary among the Kamiesberg Namaqua for almost ten years.

Both men and women wore a kaross made of the skins of sheep, goats, jackals, or wild cats. The males, in addition, wore a belt around the waist to which a jackal's tail was tied in front. The richer of them, Shaw remarked, had an ornamented girdle set with copper and iron beads. They carried a jackal's tail set on the end of a short stick, which they used to wipe away perspiration and flies. The women wore a little front apron "to which are appended six or eight chains of copper or iron. Those who cannot obtain chains, cut part of a sheep or goat skin into shreds which hang like a fringe, and reach half way to the knee" (Shaw 1970:19). The highly ornamented nature of these aprons is commented upon by Barrow (1806) who says that the points of these chains of copper and iron beads dragged in some cases on the ground. They wore sandals of ox-hide on long journeys, and some had caps of skin on their heads. Their ornaments consisted of ivory, copper and iron rings which they wore on their arms and legs; also all kinds of beads which they hung on their arms, legs and waists. Many tied small shells in their

hair. Red ochre, mixed with fat, was liberally applied to the head and many women also decorated their faces with various paints.

Compare this description with Gordon's illustration of Wildschut and his people made in 1779 (Raper & Boucher 1988:377). The men wear cloaks made of many different types of animal skins and two have the tail of a jackal (?) hanging from the front of their girdles. Note that they also have girdles ornamented with beads. They also have bead necklaces and a small container made of shaped animal horn. They carry jackal tails on sticks, one has a staff of office and the other an assegai. The women are highly decorated, wearing many bracelets around their legs (not worn by the men) and strings of beads hang from their girdles. In addition to the short front apron they also wear a longer back apron. All the individuals depicted, except one, wear various types of headgear.

With respect to dress, it has been noted that differences between men and women in Korana society, according to Engelbrecht (1936), lie in the hindkaross (back apron) worn by women and the bangles which they wear around their legs. Men wore bangles around their arms but not around their legs. Namaqua women also wore numerous strands of copper and iron beads from their front apron as well as tortoise-shell containers suspended from their waists. Men wore a small fat horn around their necks (Raper & Boucher 1988, plate 67 & 79).

Metal and its significance

There is no concrete evidence to support the contention that the Little Namaqua mined copper ore or worked metal objects. I was only able to obtain one reference to this; in April 1682 twelve Namaqua *of both sexes* visited the castle: "They are entirely ignorant of the mode of smelting ore, yet showed us several bits of copper, taken by themselves out of the mountains in their country, and run together into a lump by the heat of the fire" (Sutherland 1845:467). The literature with respect to trade indicates that copper items were obtained from the Dama (Lau 1987:5) while iron spear points, etc., were obtained from the 'Birinas' or 'Briquas' (Ba-Thlaping Tswana). Van Reenen (Mossop 1935:315) remarked as early as 1791 that the use of iron had increased among the

Namaquas to the extent that the Dama could no longer protect themselves against attack. One of Alexander's (1838) Nama guides "told him they were near the old trade route followed by the Bechuanas, who came to trade their small axes with the Namaquas for cattle" (in Wilmsen 1989:91). Gordon (Forbes 1965:108) observed that the Hottentots bartered their goats with the 'Birinas or Briquas' for iron "which they obtain, after it has passed from hand to hand, from the Portuguese of Mozambique and the Rio La Goa" (Delagoa Bay/Maputo). This remark appears to be somewhat contradictory as it asserts that the Ba-Thlaping obtained their goats from the Khoekhoen rather than vice versa, and it also claims that the source of the iron in circulation among the Khoekhoen was in fact the Portuguese rather than the Iron Age communities of the Botswana, Zimbabwe and Transvaal as is generally believed.

The Khoekhoen in general, and the Namaqua in particular, placed great value on their trade in copper and iron. Iron spear points and adzes were utensils used by men while copper was highly prized because of its use in decorative items like bangles, beads and rings. It was especially the women who desired these latter items, so much so that they may have dictated the course and extent of the trade in livestock undertaken by the men. Elphick (1985:167) reported that "In 1668 Jeronimus Cruse found the Attaqua unwilling to barter until the chief had first consulted with his wife; he thereupon came to Cruse and promised to trade sixteen oxen on condition that the Dutch would give his wife a quantity of beads". Copper and iron beads and bangles were highly desired in Namaqua society; with respect to the decorative items worn by the women, Barrow (1806:104) makes an important observation, "the ruin of the Hottentot was affected by the women's insatiable demands for drink, tobacco and ornaments - as they will gladly exchange cattle for brass buttons and glass beads". Wealthy Khoekhoen were investing their surplus stock in decorative items rather than in establishing new stock associations. They may have done so because of their fear of European designs on their herds; copper and iron beads were a tangible expression of their wealth (just like applying fat to one's body) which could not be illegally appropriated. We need to consider why Khoekhoen women were more concerned with adorning themselves with these symbols of wealth than their menfolk. Elphick (1985:167) claims that Xhosa men retained ornaments for themselves rather than giving them to their wives who enjoyed a relatively low status. The answer may lie in the power exerted by women in Khoekhoen

society. Schapera (1930) has suggested that men did all the working in wood and metal, hence, by preventing women from working with these materials, men would have ensured ultimate control over the economy. This would appear to be an example of artefacts being actively manipulated in social strategies.

Trade

There is considerable evidence for a vast exchange network in operation throughout the northern Cape. According to the accounts *all* the various social groupings in the northern Cape were involved. Wikar (Mossop 1935) described the pretty coloured beads, "like verdigris or hammered out copper" which the Namaqua obtained through trade with Dama. The latter in turn got their metal from the Ba-Thlaping and Kawep (Ovambo). Furthermore Wikar (Mossop 1935) reported that the Ba-Thlaping came to the Orange River every year to trade in tobacco, ivory spoons and bracelets, copper and iron beads, glass beads, copper rings and bracelets, knives, barbed assegais and smooth axes and awls.

The Great Namaqua, according to Le Vaillant (Forbes 1971), were in contact with the Herero and Ba-Thlaping from whom they obtained tubular glass beads, ivory and metal. Barrow (1806) remarked on the chains of copper and iron beads worn by the Namaqua women, supplied by the Dama, a tribe of people to the north. Paterson came across Little Namaqua in the Kamiesberg in 1777 who had just been to Great Namaqualand "exchanging cattle which they do for beads and tobacco" (Forbes & Rourke 1980), similar observations being made by Wikar (Mossop 1935). According to Hahn (1971) trade was largely in pottery, dishes, spears and knives but chiefly in buchu. Tindall (1959) documented a trade between the Hottentots and Bushmen with the latter providing skins of wild animals, honey, roots and larvae in exchange for worn-out pieces of clothing, tobacco, pieces of iron, old cutlery and occasionally a sheep or goat.

It is likely that it would have been the men who undertook the extensive trading expeditions described above, resulting inevitably in the acquisition of additional prestige at the expense of the women. Wilmsen (1989:58) remarks "the circulation of commodities is as old as the Early Iron Age in the Kalahari; the differential

accumulation of wealth has been a constant feature of the region from that period onward to the present". Archaeological material from Botswana provides proof that trading links may have been in operation for at least one thousand years.

Specularite and ochre

Van der Stel (Waterhouse 1932) was the first to observe that the Namaqua had a type of glistening sand, which could be interpreted as specularite. According to Wikar (Mossop 1935) the Namnykoa (Einiqua) along the Orange River crushed a kind of stone and rubbed it with fat on their heads to make them shine. This ore, which was reportedly obtained from the Blicquoas (Tswana), was probably specularite. It appears to have been a Tswana custom (Burchell 1953) to grind it down with fat and apply it to the body but chiefly the head. He records that it was a valuable item of trade with more distant groups. It was also widely used by the Korana (Bradlow 1979, Engelbrecht 1936:106) and the Griqua (Stow 1905:317) as well as the /Xam Bushmen of the northern Cape (Bleek & Lloyd 1911:377-9). There are also specularite mines at Blinkklipkop near Potmasburg (Humphreys & Thackeray 1983) and Zoovoorbij near Keimoes (Morris & Beaumont 1991) in the northern Cape which may well have been mined by Khoisan groups. According to Engelbrecht (1936) Korana women dug up the blinkklip (specularite) which was ground to a powder, combined with fat, and rubbed on their arms. It would appear that *//hara* (blinkklip or specularite) was used by the young men in /Xam society although Burchell (1953:287) mentions meeting a young 'Bush-girl' whose head was clotted with blinkklip. Rudner (1982), in her extensive review of Khoisan pigments, noted that there was very little evidence of the use of specularite by either Little or Great Namaqua groups.

There is considerable evidence, however, of the use of red ochre by the Namaqua (see Rudner 1982) as well as many other Khoekhoen and hunter-gatherer groups. A brief review of the literature indicates that both men and women applied red ochre to their bodies. However, the bulk of the early references to this substance suggest that it was primarily the women who used ochre and also largely for ritual purposes. The reason for this, suggested Hahn (1971:78) is that the word for red, */ava* or *aua* may be linked to */au* to bleed or to flow (the word for snake is */au-b* and for fountain */au-s*), thus

indicating that red ochre would have perhaps replaced blood in ritual ceremonies of the Khoekhoen. Nama women painted their faces red after the birth of a child, during puberty, during the marriage ceremonies; and a widow was also cleansed with red ochre. Red and yellow ochre as well as black soot was applied in patterns to the face. Rudner (1982) provides illustrations from Baines, Paterson and Gordon which indicate that the paint was applied in spots and stripes.

According to Vedder (1928) red ochre mixed with fat was stored in the "fat-box", which consisted of the central section of a horn with the ends closed by pieces of ox-hide. This "reddish ointment" was applied when the weather was cold. We may assume that upper and lower grindstones coated in red ochre would indicate the presence of women at a site and perhaps be indicative of the performance of certain ceremonies.

Items of material culture

Wooden milk bambus: Metal adzes were used by men to manufacture the wooden milk bambus which were used by women for milking the cattle. The wooden milk bambus has a long history. It was first mentioned in 1661 when van Meerhoff visited a Namaqua kraal and was offered milk from a large wooden vessel by the king (Moodie 1960:232). The tankards were made of a piece of solid wood and narrowed at the neck. Burchell (1953:282) observed the manufacture of these bowls from the green wood of the willow (often called osier by early travellers) on the banks of the Orange River in 1811. A hatchet was used to chop down the tree and an adze to hollow out the jug. Both had metal inserts which we may assume were obtained through trade with the Tswana. This is confirmed by Wikar (Mossop 1935) who observed that the Geisiqua manufactured the bambus "with iron implements which they get from the Blicqua" (Ba-Thlaping). Metal was probably necessary for the shaping of the wood and we may presume that the bambus was first manufactured *after* trade in metal was established with Iron Age groups in the northern Cape and Botswana.

After the jug was complete it had to be smeared with fat to prevent it splitting. Tindall (1959) reported in 1852 that the Great Namaqua were so destitute around his mission

that they were unable to make the bambus because they did not have the fat necessary to rub it and so prevent it from cracking. In passing, it should be noted that the possession of fat, here necessary on the bambus, but also of importance when applied to the body, was an important signifier of being a pastoralist. In more recent times, according to Engelbrecht (1936) the Korana decorated the margins of the bambus with zig-zag designs and cross-hatching using a hot assegai blade. Furthermore, he remarked that some of these bambus had perforations (lugs) on both sides through which a thong was inserted which the woman held when she moved the vessel for churning (1936:100). Dunn (1978), Lichtenstein (1930) and Somerville (Bradlow 1979) all remark on the bambus belonging to the Korana peoples. Wikar (Mossop 1935) reported that the Geisiqua also used them and Albrecht (in Sydow 1967) describes how the Great Namaqua manufactured them. Alexander (1838) reported that the Little Namaqua also drank honey beer from it. Shaw (1970) was also offered milk from a bambus when he visited the Namaqua in the 'onderveld' in 1819. Bleek (1864) related a fable of how the eldest daughter of the mother of the kraal was obliged to milk the cattle in a bambus. It seems very clear that in the north-western and northern Cape milk was stored in the bambus rather than in clay pots. The bambus was suspended from a forked stick opposite the door of the hut (Alexander 1838) and if found hanging like this indicated that the people of the kraal were away (Engelbrecht 1936). It was the men however who made the bambus (or *//hoeti*), according to Engelbrecht it was their chief occupation when not herding or hunting. They were extremely important household utensils according to Wandres (1908) as they could be exchanged or bartered for cattle. Wandres (1908:22) reported that he knew a Bondelswart man "who laid the foundation of his wealth by making wooden milk vessels which he bartered for cattle". It is extremely significant that the bambus was made by men and yet used by women in milking cattle. Thus, while women were responsible for milking, they nevertheless had no control over the form of the vessels they were using. However, once in use it could not be given to a third party without the wife's permission (Engelbrecht 1936:96). I suggest that the manufacture and use of the bambus in Namaqua society reflects an overt attempt by men to retain a measure of control over the domestic economy.

Calabashes: In addition to the bambus, the inhabitants of the Namaqua kraal visited by van Meerhoff in 1661 (Moodie 1960:233) also had "calabashes, which hold 20 or 30

quarts; they grow far inland; in these, as well as in the wooden vessels, they collect their milk, and churn their butter". In Namaqua the calabash is called *abas*; hence Ababis is named after the abundance of calabashes growing around the village. Milk and water could be stored in the calabash (Albrecht in Sydow 1967) and it was also used for churning purposes as butter could be produced by shaking it (Hahn 1971:108: Tindale 1959). Honey could also be stored in it (Alexander 1838). Calabashes were evidently obtained through trade with people further north and were highly valued items; one of my informants in Leliefontein still had her calabash which had been repaired on a number of occasions with beeswax.

Clay pots: Historical accounts on the use and manufacture of clay pots are scarce and not very detailed. Early references among the Cape Khoekhoen indicate that women made the pots (Grevenbroek and Mentzel in Rudner 1968) while Laidler (1938) and Vedder (1928) confirm this with respect to the Namaqua. Laidler claims to have met an old Namaqua woman who told him that her mother was a potter. Alexander (1838) mentioned that among the Great Namaqua both the earthern pot and the bambus hung from the forked stick in front of the house. Hahn (1971:21) reported in 1881 that some of the Namaqua "still make pots in the old style". Information regarding the manufacture of ceramic vessels is sketchy but the consensus in the literature is that women were responsible. It appears that food and especially meat was boiled in the pots (Hahn 1971:22;68) and that while they may have been used by women they do not seem to have been used to structure gender relations, like the bambus, during the historical period.

Weapons: Namaqua men had spears, bows and arrows and according to some reports shields of ox-hide (Moodie 1960; Forbes 1971; Mossop 1947; Barrow 1806). Alexander (1838) describes the spears as being five feet long with a small iron blade bound to the end with leather. They also had a knobbed stick to throw at game, as well as bows and arrows. The arrows were of reeds with a polished piece of sharpened bone covered in a black, sticky poison. Few of the arrows had barbed heads of iron. The principal activity of the men, he reported, was hunting and we may presume that men made their own weapons. With regard to the spears, it should be mentioned that they were also owned by hunter-gatherer groups (Lichtenstein 1928-30; Burchell 1953) although

Somerville (in Bradlow 1979) observed that only one out of fifteen 'Bushmen' on average had a spear. The ownership of a spear may have been an important distinction between pastoralist and hunter-gatherer groups.

Decorative Items: Detailed historic or ethnographic accounts on the decorative items commonly worn by the Khoekhoen are remarkably scarce. The generalised nature of the early reports means that there are very few actual descriptions of the wearing of ostrich eggshell beads by either Khoekhoen or hunter-gatherer groups. It is the ostrich eggshell beads which are of particular interest to archaeologists as they are commonly recovered from excavated sites.

According to Somerville (Bradlow 1979:21), "Bushwomen" wore girdles of ostrich eggshell beads around their waists, sometimes the chains were "so long that they can encircle the body six to ten times". Burchell (1953), describing "Hottentot" girls along the central Orange River, observed that their fore-kaross was cut into narrow strips or thongs. "These strings are often profusely ornamented with beads of all colours; an ostrich-shell girdle of many folds, hangs loosely around the waist" (1953:275). He describes the manufacture of the beads and observes that many beads were required as the strings often enclosed the body several times; "the value of a girdle is therefore considerable: as they are obtained from the more northern nations" (ibid. 1953:275). Thunberg (Forbes 1986:304) also observed that "Hottentot" groups made ostrich eggshell beads although the editor of his journal interpreted his references as pertaining to "Bushmen" groups instead. According to Engelbrecht (1936) the Korana of the Bloemhof area did not use ostrich eggshell for decoration but only for medicinal purposes.

Detailed descriptions of the decorative items worn by the Namaqua Khoekhoen however do not specifically mention ostrich eggshell beads. Barrow (1806:104, 231,342), as I have mentioned earlier, observed that the fore-kaross of the women was cut into strips from which were hung copper and iron beads. He notes that "Bushwomen" could not obtain these beads and therefore had to be content with cutting their aprons into a fringe in imitation of the "Hottentot" women. More recently Engelbrecht (1936) observed with respect to the Korana of the middle Orange River that the women wore an apron of

goatskin cut into strips. *Some* also wore a string of ostrich eggshell beads called *//nuib*. Other decorative items consisted of the seeds of the elandsboontjie, bone beads, glass beads and pendants of shell.

An examination of Gordon's (Raper & Boucher 1988) illustrations of the Little Namaqua indicates that both men and women wore girdles ornamented with beads (although the nature of these beads are unknown), as well as numerous strings of beads around the neck. Furthermore women frequently wore headdresses which appear to have been ornamented with beads. It is possible that the girdles mentioned above may have consisted of rows of ostrich eggshell beads. Hoernlé, while engaged in ethnographic research in the Richtersveld at the turn of the century, bought rings, earings and bracelets from the women, calling them "real Hottentot work" (Carstens *et al.* 1987:40). In addition she also obtained a woman's hip-bag decorated with an open-work bead panel. The evidence for the wearing of ostrich eggshell beads among the Little Namaqua is far from conclusive although we may postulate that they may have been more important before trade in copper, iron and glass beads reached significant proportions. In chapter 7 I discuss ostrich eggshell beads from archaeological contexts.

Pipes: It was van Meerhoff, visiting Namaqualand in 1661 (Moodie 1960), who first introduced the Namaqua to the smoking of tobacco. His description clearly indicates that they were not familiar with the concept but they took to it rapidly, van Meerhoff remarking that a madness for tobacco had come over them. It has been suggested that Khoekhoen and hunter-gatherer groups may have smoked various herbs before tobacco and cannabis was introduced by Europeans in the seventeenth century (Morris & Beaumont 1991) but there is insufficient evidence for this from Namaqualand.

By 1705 the trade in both tobacco and dagga was well-established (Laidler 1938). Since Dutch clay pipes had a relatively short life span other methods of smoking the tobacco had to be invented. It was the Namaqua, by all reports, who started manufacturing soapstone pipes. Paterson (Forbes & Rourke 1980) illustrates a classic cigar-type stone pipe around 1777. Alexander (1838:91) observed that the pipes of the Namaqua were of green soapstone mined in the Kamiesberg. They were 3-4 inches long, narrowing at

the mouthpiece. The pipes were ornamented with a little carving. The Korana also made stone pipes (Somerville in Bradlow 1979:94) but obtained their stone from Little Namaqualand and the tobacco from the Briquas. The manufacture of soapstone pipes (like the wooden bambus) is dependent on the availability of the necessary metal tools which were probably obtained from Tswana groups. According to Morris and Beaumont (1991), a stone pipe from the western Orange Free State has been dated to 570 BP, indicating that stone pipes were being manufactured before European settlement in this part of the country.

Various other visitors to Namaqualand have remarked on these stone pipes. Laidler calls the cigar-shaped pipe the "Bushmen" pipe and remarks that of the thirty-five "Hottentot" burials investigated by him, only one contained such a pipe. There is another type of stone pipe currently in use in Namaqualand. It has a bowl at an angle to the stem and Laidler (1938) witnessed the manufacture of such a pipe in Little Namaqualand in 1911. He claimed that it was the man's pipe although currently only elderly women in the Leliefontein reserve have been observed using it. Both men and women enjoyed smoking tobacco and the possibility that they used different styles of pipe and that these may have changed through time present interesting archaeological possibilities.

Musical instruments: The musical instrument most commonly associated with the Namaqua is the reed flute. Made from the same reeds used in the manufacture of arrows (Wikar in Mossop 1935), they were played by the men. The earliest descriptions of men performing the reed dance date to 1685 when van der Stel visited the area (Waterhouse 1932). Gordon (Smith & Pheiffer 1992) noted that according to the Namaqua they had learnt their flute dances from the Dama. The reed ensemble could consist of up to thirty flutes, each with is own name. The reed dance could only be performed by adult men; boys were taught the steps of the reed dance and how to play on the flutes after going through initiation. It is important to emphasise here that although women were allowed to be present at the reed dances, they could not play the flutes (Kirby 1932). Engelbrecht (1936) has indicated that the reed dance was performed among the Korana in order to ask for rain. While men played on the flutes they moved in a circle, women stamped around in an outer circle clapping their hands. Gordon

(Raper & Boucher 1988:289) illustrates a reed dance although the flutes appear to be made of horns rather than reeds.

The Korana women also played on a drum made of the wooden bambus and covered in skin (Kirby 1932). In addition at least three musical intruments made form bows were also played (Kirby 1932).

Other items of material culture include the tortoise-shell container used by both Khoekhoen and hunter-gatherer women for storing buchu (Alexander 1838; Engelbrecht 1936); the jackal's tail brush also used by both groups; the rope made by women for use in building the mat house, the ostrich bone awls made by men and used by women for stitching the mats (Hoernle 1987) as well as horn containers used for storing fat. These horn containers, the ends of which were covered in skins, contained the fat used in ritual massage although other medicinal substances as well as gunpowder was apparently also stored in it (Engelbrecht 1936). Gordon's illustrations suggest that they were only worn by men around their necks (Raper & Boucher 1988) although Engelbrecht asserts that women owned a smaller horn filled with rooiklip (ochre).

Numerous other items of leather, some collected by Hoernle, are at present housed in the South African Museum. The historical records do not unequivocally indicate who worked the animal hides. At present women work hides but some of my older male informants have a very intimate knowledge of the processes involved (Webley 1990) and it is conceivable that they may have worked skins in the past. Englebrecht (1936:96) in fact observed that "skin karosses were also prepared and sewn by men".

Namaqua men manufactured and decorated a variety of items of material culture at around the turn of the century, such as the *!nara* knives of the Topnaar Hottentots (=/Aonin) of southern Namibia (Schultze 1907:198), the fat-horn (1907:208), the wooden milk bambus (1907:245), stone pipes (1907:248) and the copper bracelets (Schultze 1907:249). Since men made all these items we may assume that they selected the decorative motifs which consisted of horizontal and diagonal lines, cross-hatching and zigzag patterns. This does not necessarily mean, however, that women did not make use of these decorative motifs as well.

SLAUGHTERING AS AN SYMBOLIC ACT

> "One can smell the fat dropping into the fire; the smell and smoke of the flesh of fat ewes lies over the kraals. And =/Eixa/kha/nabiseb's dogs can eat fat, and I must tie the belt around my empty belly" (Bleek 1864:72).

The ritual consumption of meat among the Little Namaqua appears to have been necessary for the reproduction of the social order (Smith & Pheiffer 1992). Livestock were slaughtered after childbirth, for the girls' and boys' initiation ceremonies, during the marriage and re-marriage ceremonies, on the death of an individual, during illness and during the initiation of the ceremonial slaughterers. That a separate category of ceremonial slaughterer existed among the Little Namaqua is confirmation of the degree to which these ceremonies regulated all aspects of their society. "Their whole creed comprises nothing but ceremonial killing" (Mossop 1935:67). Elphick (1985) claims that the Nama had difficulty rebuilding their herds because of their need to slaughter to meet their social obligations. He cites Schultze (1907) who reported that poor Namaqua often sold their last milch cow in order to buy a slaughter beast for a wedding.

A large kraal could have as many as ten ceremonial slaughterers although the more common number was one to three (Smith & Pheiffer 1992). If kraals each had only a few slaughterers who were allowed to perform the necessary rituals in Namaqua society then it is clear that these rituals would probably have been performed during periods of aggregation, and among the Kamiesberg Namaqua this would have occurred during the summer months. In the majority of cases the ritual required several sheep to be slaughtered, cattle (calves) being only rarely mentioned. Furthermore Gordon also refers to a steenbok as well as a mongoose slaughter. During certain of these rituals the knuckle-bone of the slaughtered animal was bound to the hand while on other occasions the sinew was required. Contemporary observations in Namaqualand show that removing the back sinews from livestock requires a certain method of slaughter. It is clear that the manner in which an animal is slaughtered, the division and distribution of body parts, the cut marks and the smashing of the bones for marrow are culturally specific and may be traced archaeologically.

The most comprehensive description of the slaughter and distribution of meat among the Khoekhoen is provided by Engelbrecht (1936) for the Korana. During the first distribution certain portions are set aside for the initiated men, after which the secondary distribution takes place and meat is sent to the huts. Meat set aside for initiated men is ritually consumed by the entire male group, symbolically separating them from the women and children. We have no evidence that taboos existed preventing women from eating certain body parts; however, men were able to select preferred portions by virtue of their position as butchers of meat. We should not consider the distribution of meat in pure economic terms; Wilmsen (1989) has shown that political statements are made in each wave of distribution.

The slaughtering and distribution of meat among contemporary pastoralists in Namaqualand may have been influenced by western practices but it is remarkable that both game and livestock are slaughtered in a very standardized fashion. Informants can no longer recall how meat was distributed, indicating that this custom fell from use some time ago. People did emphasise that they divided both livestock and large game not only among members of their residential group but also among family and friends of the co-residential camp. Even total strangers are not refused a portion. Since domestic groups took turns to slaughter and divide the meat, each family may have slaughtered fairly infrequently. Because livestock was shared we may expect that we are unlikely to find all the bones of a specific animal at a camp, differential preservation notwithstanding. Furthermore, the seasonal variability in the slaughter of domestic stock is only indirectly related to environmental conditions; stock is generally slaughtered to meet various social obligations although ritual activities generally coincide with certain seasons of the year.

DISCUSSION

How does one undertake contextual archaeology? According to Hodder, meaning is created and expressed by similarities and differences along four dimensions; they are space, time, typology and unit of deposition (hearth, pit, etc.). Similarities and differences are constructed by making boundaries between things (these boundaries may be real fences, or changes in decoration, changes in temporal associations, etc.). In

chapter 7 I consider these various issues and attempt to relate the archaeological material from my excavations to the material cultural items discussed above. I try to show that gender relations may be extracted from the archaeological record.

To summarise: by colonial times Khoekhoen women exerted considerable power over the domestic economy and were of great importance in the social relations of production of the entire society. It is their emerging power during precolonial times which needs to be traced in the archaeological record. Material culture, I have shown, may be used to structure gender as well as age-group relations within societies and therefore in this chapter I considered how various items of material culture may have been utilised to this end.

I have shown that by the seventeenth century Khoekhoen ceramic vessels were being used for cooking food rather than for storing dairy products. I have suggested that the wooden milk bambus and the calabash were commonly used among the little Namaqua for processing milk products. The wooden milk bambus was especially important in structuring gender relations during the colonial period. Since we may postulate that the utensils manufactured for personal or household use "would have been important as material manifestations of the relations of production" in their society (Wilmsen & Denbow 1990:501), it follows that particular attention should be paid to these remains from archaeological sites. Decorative items such as ostrich eggshell beads, which are commonly manufactured by women, may also be important indicators of changing power relations between the sexes but equally well may have been used to signal differing ethnic perceptions.

We need to consider the manner in which extensive trade networks in operation throughout most of the northern Cape during the historical period may have structured gender relations. For how long had this exchange system been in operation? How were the Little Namaqua involved? We need to ascertain from the archaeological record whether their participation would have brought about significant changes in their social organisation. I consider this issue in chapter 7.

I have shown how the ritual consumption of meat appears to have been necessary for the reproduction of the social order. The ritual sharing of food is generally considered to be "conducive to the integration of society" (Lincoln 1989:88) as bonds of obligation are established between those who share and a rigid boundary maintained with those excluded. In this case initiated men frequently enjoyed certain cuts of meat to the exclusion of other members of society. It is therefore important that large samples of domestic stock from archaeological sites (like those from Kasteelberg, Die Kelders and Boomplaas) be examined for cut marks which may indicate a possible 'ethnic signature'.

To conclude, material cultural items are not arbitrarily selected to structure certain social relations, but the way in which they are manipulated depends on the internally generated symbolic schemes of the society. In this chapter I have attempted to show that "It is not possible to set up a general predictive relationship between resources, competition and ethnic distinctions in material culture without also involving aspects of social organisation" (Hodder 1982 a:73). General laws cannot be set up between material cultural items and social organisation because the link between material culture and social organisation depends on the local historical context.

4. THE ISSUE OF ETHNICITY AND THE ROLE OF MATERIAL CULTURE IN BOUNDARY MAINTENANCE

In chapter 2 I examined the nature of Little Namaqua social relations and pointed to gender as the most probable source of conflict and tension within the society during historical times. Furthermore, I intimated that material culture played an important role in structuring relations between the sexes. In chapter 3 I showed how various items of material culture were used to negotiate power relations during the historical period in Namaqualand.

In this chapter I consider the concept of ethnicity, how it emerges and how ethnic relations between groups are structured. Does it provide valuable insights into the debate concerning the Khoekhoen and hunter-gatherers? Did Little Namaqua social relations differ significantly from those of hunter-gatherer groups like that of the !Kung? Could we postulate the existence of two 'ethnic' groupings during the precolonial period in Namaqualand? Finally, what role does material culture patterning play in within-group and between-group boundary maintenance?

Defining ethnicity

I have discussed above that Little Namaqua social relations do not appear to have differed significantly from those of hunter-gatherer groups with respect to reciprocity and accumulation of surplus. In this section I consider the thorny issue of 'ethnicity' since both Smith (1990b) and Parkington (1984) have tentatively suggested that the Khoekhoen and the soaqua constituted two separate 'ethnic' groups.

Some would argue that ethnic groups are the product of colonialism. Wilmsen (1989) has claimed that it was the colonial powers who deliberately constructed the ethnic categories we study today, with the aim of providing a convenient labour pool.

Ethnicity, he asserts, is the historical product of the labour market system and was not a feature of precolonial tribal structures. The South African system of administration emphasized "tribal" divisions which is why collective terms like Bushmen have survived so long. The "emergence of ethnicity as a central logic" (Wilmsen 1989:31) began towards the end of the 17th century at the Cape and prior to this terms such as 'Hottentot' or 'soaqua' were primarily epithets of origins with economic connotations. So Marks (1972), for example, has claimed that during the nineteenth century in South Africa political boundaries were fluid. Ethnicity, she claims among Africans, was of little significance; "group identity associations" were what Worsely (quoted in Wilmsen 1989) has called "relative, situational categories".

This approach denies the existence of pre-colonial 'ethnic'groupings based on differences in economy, social structure and political power. Since there are no societies in the world today who have not been exposed to a capitalistic market economy we are unable to test whether this hypothesis is correct. However, if we accept the premise that ethnicities are constructs based on political differences between peoples then it is clearly possible that ethnic groups/identity-conscious social groups may also have occurred in the past. We need to determine from the archaeological record whether separate sets of related traits existed in the Cape Province during the last two thousand years and whether we can link these sets to particular 'ethnic' groups. While not denying the role played by seventeenth century colonial powers in the construction of ethnicity at the Cape, I believe that the issue of pre-colonial ethnic groupings needs to be considered in greater depth rather than being rejected out of hand.

There are two positions on the origins of ethnicity. According to the "primordialist" position, ethnicity is a deeply rooted affiliation while the traditional liberal view has been that ethnicity is one affiliation among many, highly changeable and responsive to circumstances. The problem with the primordial approach is that it does not address the fact that ethnic sentiments can change according to circumstances. "Ethnicity could be consciously manipulated for personal gain. Ethnic boundaries between groups are sometimes quite fluid. Smaller groups often merge into larger ones and vice-versa. New ethnic groups constantly arise and disappear, and individuals may choose to assert ethnic identities or not as their interests or fancies dictate" (van den Berghe 1981:18).

One of the leading proponents of the subjectivist position has been Barth who defined ethnicity as follows: "Ethnicity is whatever the natives say it is. It is the natives' perceptions of reality that create and define ethnic boundaries and ethnic relations" (Barth quoted in Van den Berghe 1981:18). Van den Berghe claims that the problem with this approach is that natives do not always agree with each other, even within cultures.

The objectivists, who are generally non-members or outsiders, claim that ethnic groupings can be isolated "on the basis of socio-cultural categories and analysis" (Cohen 1978:381). They suggest that ethnic groups be categorized on the basis of certain selected traits. However, the problem with this approach is that the criteria can "vary with societal complexity, regional and continental contexts, the ethnographer, and probably with time as well" (Cohen 1978:382). The ethnic entities encountered in the historical literature were often arbitrarily or even inaccurately imposed by colonial authorities with their own hidden agendas. Archaeologists, too, of necessity follow an objectivist approach in their analysis of ethnic groupings as a subjectivist approach is generally beyond the scope of our data.

There is no single coherent definition of ethnicity or of ethnic boundaries. Older views placed emphasis on the boundedness of the group while more recent definitions stress the situational nature of ethnic classifications. Cohen (1978:387) defines "ethnicity as a series of nesting dichotomizations of inclusiveness and exclusiveness. The process of assigning persons to groups is both subjective and objective, carried out by self and others, and depends on what diacritics are used to define membership. The nesting quality is similar to that of a social distance scale in which the greater the number of diacritical markers, the closer one gets to a particular person and/or his kin group". Furthermore, "the diacritics always have about them an aura of descent" (1978:387). Descent, claims van den Berghe (1981:16), is the central feature of ethnicity: "Ethnicity is common descent, either real or putative, but, even when putative, the myth has to be validated by several generations of common historical experience". An ethnic group cannot be created by creating a myth. The myth has to be rooted in historical reality to be accepted; in other words, it is generally rooted in generations of shared historical experience; it cannot be created from nothing.

"Ethnicity, then, is a set of descent-based cultural identifiers used to assign persons to groupings that expand and contract in inverse relation to the scale of inclusiveness and exclusiveness of the membership. The important point is that ethnic boundaries are not, as Barth (1969) implies, stable and continuing. They may be in some cases and may not be in others. They are multiple and include overlapping sets of ascriptive loyalties that make for multiple identities" (Cohen 1978:387). Ethnicity, as Cohen (1978:388) points out, is first and foremost situational. How one labels oneself and others depends on the situation.

The situational or nesting quality of social identity as explicated by Cohen is also followed by Maynard (1988) in his study of Protestant churches in Ecuador. "How one acts, and, thus, the alignment of groups, is determined by which of many identities we act on in any particular context" (1988:102). It is important to recognise the conflicting interests of the individual. Interaction, which generally occurs at the level of the individual, depends on the image which the person has of himself within a particular situation. Maynard (1988:115) remarks "How we act, then, is not solely dictated, certainly not determined, by a single cognitive or cultural category, or by context alone. It ultimately is dependent as well on the interjection of a human decision based on an array of motives and interests". People, he asserts, do not always "act in comformity with cultural idioms. Only in cases of extreme contrast and conflict between groups might a particular idiom of identity assume paramount importance , and loyalty to it be strictly enforced".

These various categories (defined by a certain configuration of characteristics) of belonging may also be hierarchically stacked, hence the 'nested' quality of identity. Categorising further implies that we are contrasting two sets of criteria, in other words, distinguishing between "us" and "them". This is not to imply that there are absolute, cognitive differences between the two groups, rather that the members of the groups are placing a particular emphasis on a set of unique rather than shared traits within a given social situation. It is for this reason that various researchers have remarked on how ethnicity can be manipulated for personal gain, with individuals changing the way they dress, talk and behave, depending on the context. I present an example below of how ethnicity is manipulated in East Africa.

An East African example

Both Hall (1985) and Parkington *et al.* (1986) briefly refer to the interaction in East Africa between Dorobo hunter-gatherers and their pastoralist neighbours, the Samburu and the Maasai, and find similarities with the southern African situation. I should like to describe the situation in East Africa in greater detail in order to demonstrate the striking parallels with the Khoekhoen:San situation in the Cape Province. It is my intention to show how an individual's 'ethnic' affiliation may shift according to circumstances.

Important work has been undertaken by Galaty (1982). He is concerned with examining "ethnic shifters", i.e., the multiple and nested quality of ethnic identity among the Maasai of East Africa. Ethnicity is not "a self-evident unit of social reality " (1982:1) as defined by Barth (in Galaty 1982). Using a combination of subjectivist and objectivist approaches, Galaty (1982:2) asserts that the first step to investigating ethnicity is that the analysis be grounded in "indigenously meaningful categories of social classification ". In other words, the category to be studied needs to have a name or label. This label does not merely mirror the social identity of the group but plays an active role in the formation of social groupings and the maintenance of social boundaries. It is through the use of a name that the members of a group express and comprehend social boundaries. "One might well ask what ethnicity would be in the absence of a name (or at least a distinctive verbal identification) that portrays the significance of differential interaction, shaping that interaction and in so doing creating social boundaries" (1982:3).

The name, then, embodies certain values and qualities accepted and manifested by all who belong to the group. Among the Maasai this would include a certain behaviour, a certain style of dress and, most importantly, a particular form of economy. "Maasai" only has meaning when it is opposed to "non-Maasai" and in contrasting these two concepts we have to establish "symbolic boundaries through the criteria of inclusion and exclusion" (1982:5). Through applying different opposing criteria we are able to examine the moving boundary. In general, "Maasai" is identified with pastoralism and is therefore frequently opposed to hunting and gathering although it may also be

opposed to a number of other criteria. One of Maasai myths relates how the Maasai and the Dorobo (Torrobo) are of common descent but that the Maasai acquired stock through the intervention of God while the Dorobo have continued to be hunters and gatherers. The distinction between hunting and herding is considered to be fundamental to Maasai social identity. Many Maasai who lose their stock, however, join Dorobo groups and adopt a hunting lifestyle until they have built up their herds and are able to return to pastoralism. The term "Dorobo" means "person without cattle". Small Dorobo bands often adopt the language and cultural traits of the pastoralists and agriculturalists with whom they have the most contact. They may also marry members of the host group. Some Dorobo have acquired stock of their own while others care for the herds of their Samburu or Maasai neighbours. Hodder (1982a) found that, while certain Dorobo groups mixed freely with their neighbours and exhibited no observable material cultural differences, others were involved in a more competitive relationship with their neighbours and consequently material cultural differences were more pronounced. This is a clear case, indicates Hodder, of how the Maasai manipulate ethnic identity for their owns means. Maasai may become Dorobo if they wish and vice versa. "Thus the outer surface of being Dorobo has two faces. The verbal signal identifies the Dorobo as being non-Maasai; the material culture signal shows the single identity of the two groups" (Hodder 1982a:103).

The Maasai also distinguish between themselves and agriculturalists as well as other pastoralists, but the significance of the term "Maasai" shifts with the particular context of use. It is clear, concludes Galaty (1982:14), that the term does not denote a specific, bounded ethnic group but that its meaning depends on its use within a specific context. Thus, the Maasai and the Dorobo distinguish between themselves when the question of subsistence is important, but both regard themselves as Maasai when the emphasis is on "substantial descent or common political identity". Galaty (1982:16) concludes this review by affirming his belief in the core meaning of "Maasai", predicated on a particular form of subsistence and common descent. The core only retains this meaning, however, because of the range of oppositions described above; they "supply the content and external anchoring for the specification of core identity".

The range of theoretical material dealing with ethnicity in East Africa is of considerable importance to the current debate regarding the distinctions between Khoekhoen and hunter-gatherers in South Africa. It would appear that the seventeenth century soaqua were in fact people who lived on the periphery of Khoekhoen society. Under favourable conditions they could be assimilated or incorporated in the capacity of servants, while during periods of competition or stress Khoekhoen individuals would be banished or outlawed and became 'Bosjesmans'. So Wandres (1908:10) has reported "an incorrigible, unworthy member is, so to say, classed as a Bushman. His belongings are confiscated and he has to lead the life of an outlaw". In this case the individual is banished to the 'outside' for not obeying the rules of society, suggesting that the proper *behaviour* determined whether one belonged to a certain group or not. There is clearly a distinction between an insiders definition of a community and that of the outsiders view which may be based "on language or economic mode of subsistence" (Thornton 1982:228). There would appear to have been a cultural division between inside and outside, so that unacceptable behaviour could result in exile where one joined the company of other individuals also living beyond the pale. Instead of social stratification, we have instead a "spatial stratification with a correlative polarity of values" (Thornton 1980:228).

Ethnic Relations

The example above illustrates the situational nature of ethnicity. Interethnic relations are fluid and constantly changing according to circumstances. How does ethnicity affect intergroup relations? According to Cohen (1978) the nature and degree of contact between groups as well as the relative power available to each in the interactive situation varies considerably. He therefore distinguishes fragmented relations, which occur when groups have little or no contact, from indirect relations, which occur when groups are unequal and contacts between them infrequent. Although the one group may be stronger than the other, the groups live in such isolation with respect to each other that both retain their autonomy. Balanced relations occur between two groups occupying the same territory, who are able to maintain their ethnic distinctiveness. Cohen's final category is that of stratified or unequal relations between groups. They emerge when "membership helps significantly to determine access to scarce resources" (1978:391).

We should beware, cautions Cohen, of equating unequal relations between ethnic groups with social stratification. While stratification and ethnicity may correlate they may also vary independently. "Stratification intensifies when one or more ethnic groups have control over resources that become scarcer and more valuable" (1978:393).

Ethnic relations do not remain static over time but may change according to circumstances. Acculturation and/or assimilation may take place between groups. When distinct cultural groups come into contact they may "borrow" cultural items (words, tools techniques, values, clothing, styles, foods, etc.) from each other. This process is called acculturation (Van den Berghe 1981:215). It is a complex process whereby cultural items are often re-interpreted, that is, they may acquire different meanings and functions from those they had in the culture of origin. Groups may borrow reciprocally, but in certain situations, where one ethnic group is clearly dominant (in numbers, technology, wealth, political power etc.), acculturation is predominantly unidirectional. Subordinate groups may adopt the language, religion and culture of the dominant group rather than vice versa because doing so confers certain social advantages. Occasionally, a dominant group (which is in the minority) will adopt the culture of the people it has conquered.

Assimilation, on the other hand, refers to the extent to which a group that was originally distinct has lost its subjective identity and has become absorbed in the social structure of another group. Acculturation is generally a precondition of assimilation although it does not always lead to it. There are many cases where a group may have acquired the culture of the dominant group but is kept in a subordinate and structurally distinct position. Assimilation needs to be sought by the subordinate group and granted by the dominant group. Van den Berghe (1981:218) proposes the following model for assimilation which I believe may illuminate our discussions on Khoekhoen:hunter-gatherer relations:

(a) The greater the cultural similarity between the groups the more likely assimilation becomes. Assimilation between two groups speaking closely related languages is much easier than between people speaking unrelated or distantly related languages;

(b) The smaller the group is in relation to the rest of the population, the more likely assimilation is. This is because smaller groups have fewer resources and are dependent on the rest of society;

(c) Low-status groups are more likely to assimilate than high-status groups because they have more to gain by it;

(d) The more dispersed a group is, the more likely it is to assimilate. "Territorial dispersion interferes with interethnic solidarity and therefore reduces the benefits of nepotism" (Van den Berghe 1981:218)."Territorial dispersal negatively affects ethnic solidarity for the simple reason that ethnics have in most cases to be in physical contact with each other in order to benefit from ethnic favouritism" (1981:221).

(e) "Immigrant groups are more likely to assimilate than native groups because immigration is typically accompanied by geographical dispersal and a sharp reduction in the network of interethnic ties. The immigrant is also at a disadvantage *vis-à-vis* the native and therefore heavily reliant on the latter. Pressures to learn native ways are directly linked to survival and success, whereas retention of ethnic separateness frequently has the opposite effect. The native, through experience, is generally better adapted to his habitat than the immigrant. Independently of the geographical dispersal that often accompanies migration, then, immigration puts a premium on imitating the ways of the presumably better-adapted native. Acculturation in turn favours assimilation" (1981:218). The more isolated the immigrant is from fellow-ethnics and the more the immigrant emigrates as an individual, the more likely acculturation and assimilation are to take place. Immigration fosters acculturation and assimilation for ecological and social reasons. "The native usually knows best; it behooves the newcomer to learn the native ways, in part because the native's adaptation to the habitat is in fact empirically tested and superior, and in part because the native is boss (if in fact the native is)" (1981:222).

Thus, to summarise, during periods of migration the immigrant group (especially if its numbers are low) is likely to become assimilated into the indigenous population. The probablity of this happening is greater if they are culturally similar; in this case the Khoekhoen were also hunter-gatherers who had only recently acquired stock. If the Khoekhoen had established an own identity while still in northern Botswana they would have had difficulty in maintaining it when they moved into a new area. In fact,

McGuire (1982) claims that when immigrant groups arrive in a new country they generally do not constitute an ethnic group but may become so over time.

Emergence of ethnic identities

What conditions lead to the formation of ethnic identities of a particular scale and intensity? Ethnic identity, however, does not just happen but is generally mobilized by leaders in response to some issue which is of importance to the group. Other ethnic groups, as defined by the leaders, "must be seen as competitors for scarce resources and rewards so that their own recognized, and now salient, ethnic status is seen as a real factor in the denial or achievement of desirable goals. The ethnic identity being mobilized must have real diacritics of ascribed status lumped within its boundaries so that the we/they is based on deeply felt and valued distinctiveness" (Cohen 1978:397). Cohen (1978), Hodder (1982a) and McGuire (1982) all ascribe the emergence of ethnicity to a population's need for competitive advantage. The formation of an ethnic identity is the result of economic competition and stress. McGuire (1982:170) adds that competition may be not only for natural resources but also for material, social and psychological rewards. Ethnic identity is then exploited as a political or economic tool to advance the group's welfare.

Economic stress over competition for identical needs may result in the emergence of "identity-signaling social groupings" (Stevenson 1989) and distinct material cultural boundaries. I should like to stress here that not all identity-conscious social groups are ethnic groups although they have the potential to become so. According to Stevenson (1989:272) "an identity-conscious social group need not possess concrete characteristics normally associated with traditional definitions of ethnic groups". Nevertheless, the conditions for the emergence of social differentiation are believed to be the same for both categories. For the purposes of this thesis I prefer to consider whether the Khoekhoen and hunter-gatherers represented separate 'identity signalling social groups' rather than two 'ethnic' groups. Social group differentiation develops as a result of interaction rather than isolation (Hodder 1982a; Stevenson 1989).

For example, with respect to contemporary hunter-gatherer groups in Botswana, Sugawara (1991) has shown that adjacent hunter-gatherer groups frequently distinguish between themselves on the basis of behaviour. They may characterise others as not having the proper *manners*. This generally occurs during the initial stages of group identity formation but two emerging social groupings may only be maintained with the development of the necessary symbols which underscore their distinctiveness. Stevenson reviews the types of symbols which may be used, i.e., dress, behaviour, gestures, architecture, etc. These symbols or items of material culture not only reflect the differences between the groups involved but, as I have already indicated in chapter 3, they actively structure their relationships.

We need to consider whether the arrival of small groups of pastoralists some two thousand years ago would indeed have triggered a conflict of interests between them and the indigenous hunter-gatherer groups which would have led to material cultural boundaries. In the first place, it is possible that the inability of the hunter-gatherers to obtain livestock from the pastoralists (if indeed the pastoralists refused to part with their stock) may have resulted in conflict. In the second place, the acquisition by the Khoekhoen of cattle ca. 1300 BP (Klein 1986; Klein & Cruz-Uribe 1989) in the northern and western Cape may have resulted in a conflict over access to land. So Parkington *et al.* (1986) are of the opinion that cattle would have competed with the large herbivores for pasture on the strandveld forcing hunter-gatherer groups to move to mountainous regions where they resorted to small faunal packages. Thirdly, the growing importance of trade with the Early Iron Age communities in Botswana could potentially have resulted in considerable stress ca. 1000 BP and later as hunter-gatherer groups also attempted to become involved in the lucrative trade in iron and copper. Finally, the arrival of the Dutch in the seventeenth century may have played a pivotal role in the emergence of strongly marked social identities. There are possibly more factors which would also have contributed to the stressing of a particular social identity during the last two thousand years but the above examples illustrate that cause did exist. "Restricted access to resources and competition may be associated with overt expressions of distinct material cultural differences" (Hodder 1982a:187). We need to determine from the archaeological and historical record whether any of the above incidents did trigger "identity-signalling social groups" in Namaqualand. Furthermore,

since by all accounts these groups lived interspersed amongst each other during historical times, the need to signal an identity separate from one's immediate neighbour should have led to marked cultural differences. Following Hodder (1982a) we may hypothesise that certain items would have been selected as symbolising the quality of being a Khoekhoen or a hunter-gatherer, setting them apart from the 'other'.

HUNTER-GATHERER SOCIAL RELATIONS

Attempting to isolate the diagnostic characteristics of hunter-gatherer society is an exercise which could fill several volumes and I can do no more than highlight the complexity of the situation. Traditional definitions which claim that the economic/ecological base of hunter-gatherer society determines its social relations have been criticized as being functionalist in nature (Wilmsen 1989). Wilmsen has therefore queried the assertion that the social relations of production in hunter-gatherer societies are characterised by reciprocity and sanctions against accumulation (Hall 1987). Citing Weissner (1977), he shows that the majority of *hxaro* partners (persons who engage in preferential, reciprocal exchange) are located within the same or adjacent *nqoresi* (areas of land exploited on a sustained basis by user groups) and a high proportion of these exchanges are associated with marriage associations. *Hxaro* exchanges generally take place between individuals who share the same grandparents or great-grandparents. The aim of such exchanges cannot therefore be ascribed to gaining access to the *nqore* of other bands during periods of emergency as was suggested by Lee (1979). Wilmsen (1989:181) is rather of the opinion that *hxaro* obligations were "undertaken to ensure entitlement consolidation within descent groups".

With respect to the sharing of meat within the band he has shown that it is not an altruistic gesture nor purely functionalist in the sense of guaranteeing a reciprocal response during lean times but rather an emotionally charged event. "Thus meat sharing - the putative sine qua non of San egalitarianism - is thoroughly controlled to meet the political ends of the distributors" (Wilmsen 1989:229). With respect to the concept of a surplus in hunter-gatherer society Hindess and Hirst (quoted in Wilmsen 1989:56) claim "that all modes of production must necessarily extract a surplus in order to reproduce social relations from generation to generation". There is, shows Wilmsen

(1989:265), linguistic evidence for unequal possession in Zhu ideology although it may be considered bad form to display this publically. He cites Weissner who remarks "who can regularly produce a surplus do have a broader sphere of *hxaro* than the average San" (1977:224). Furthermore, a broader sphere of "exchange partners is associated with enhanced political influence - that is, power" (1989:265). The word for 'chief' in Zhu society is apparently derived from the word for wealth. The basis for wealth is *nqore* entitlements which is derived from each person's kinship and marriage relations.

All of this of course leads Wilmsen to question the 'egalitarian ideology' supposedly exhibited by the Zhu. Class, he maintains, "is an inherent feature of their, and probably all San, social relations" (1989:271). Wilmsen's interpretation of historical and ethnographic data is the antithesis of that taken by Lee (1979) and although broad consensus has not yet been reached on this matter it is apparent that distinctions drawn between the Khoekhoen and hunter-gatherer groups based on issues such as reciprocity and accumulation are open to debate.

MATERIAL CULTURE AND BETWEEN GROUP BOUNDARY MAINTENANCE

While Stevenson (1989) insists that a whole array of symbols are necessary to distinguish between groups, Hodder (1982a) claims that only a few items of self-decoration or items of ceremonial use may be sufficient. Although he says that utilitarian items may show the greatest degree of overlap, historical archaeologists have shown that food remains, ceramics and architecture are often very powerful ethnic markers (McGuire 1982). I consider below the historical evidence for the manipulation of material culture in between-group boundary maintenance between Khoekhoen and hunter-gatherer groups.

Language, I have shown, may play an important role in shaping ethnicity although the 'subordinate' group frequently adopts the language of the group to which they aspire. One of the first changes observed among the Zhu in Botswana was the adoption of the language of their 'oppressors', namely Setswana (Wilmsen & Vossen 1990), within a period of approximately one hundred years. Is there any evidence that hunter-gatherers had adopted the Khoe language during 2000 years of 'hegemonic' control? According

to Elphick (1985:29), Wikar and Gordon had observed that many hunter groups in the Orange River area spoke Khoe fluently, while some hunters to the north of Cape Town were possibly also able to communicate in Khoe. Those hunters of the interior regions of the Cape Province could not speak Khoe at all. I do not deny that there were "language differences between stock owners and stock thieves" (Parkington 1984:158, 160) during historical times. However, it would seem that those hunters who were in regular contact with the Khoekhoen were also speaking (and may have adopted) the language of the incoming group, suggesting, says Elphick (1985:30), "that other aspects of their culture could be at least partly Khoekhoen, and hence not purely aboriginal in nature". While this deduction was evidently aimed at supporting Elphick's broad model of upward and downward cycles, it is nevertheless true that language differences often pose the most significant barriers to inter-ethnic movements. The fact that certain hunter groups did speak Khoe means that they were in the position to become pastoralists.

Clothing and ornamentation are frequently manipulated in between-group boundary maintenance but nineteenth century accounts suggest that dress style did not differ noticeably between Namaqua and the 'Bosjesman' although differences in status/wealth were reflected in the relative amount of ornamentation worn. So Alexander (1838:287) remarked that the skin petticoats of the 'Bushwomen' were shorter than those of the Namaqua women but otherwise "there is a general resemblance in dress and feature". If one compares this illustration with that of a hunter-gatherer family (Raper & Boucher 1988:337), as well those 'wild Bushmen' visited by Gordon to the north of the Orange River (Raper & Boucher 1988:271), then it appears that there was no significant difference in dress between the Namaqua and the 'Bosjesman', save for the high degree of ornamentation affected by the Namaqua. According to Barrow (1806) 'Bushwomen' could generally not afford to acquire the copper, iron and glass beads worn by the 'Hottentot' women on their fore-karosses and therefore cut the front of their aprons into thongs in imitation of this. Nineteenth century illustrations frequently show 'Bushmen' with arrows arranged in the fillets around their heads (see illustrations by Bell, Daniell, Delessert and I'Ons in Steyn 1990). One obvious interpretation of this custom is that it is meant to inspire fear in the observer. It is an outward expression of what it meant to be a 'Bushmen' during the turbulent nineteenth century.

Housing: without going into the literature in great detail it is apparent from many nineteenth century illustrations that many 'Bosjesman' groups were using mat huts or mat shelters (Bleek & Lloyd 1911; Raper & Boucher 1988, plate 41; Steyn 1990:94) during historical times. Other accounts and illustrations, however, indicate that the 'soaqua' generally contructed huts from bushes and grasses (Parkington 1977). I would suggest that hunter-gatherer groups were in the process of adopting the matjies (reed) mat during the historical period. With respect to the arrangement of the huts, one of Bleek's /Xam informants sketched a settlement with rows of huts stretched along the margins of a ravine (Bleek & Lloyd 1911, plate opposite page 172) while a second sketch made in 1878 shows two parallel lines of nineteen huts (Bleek & Lloyd 1911:224). It was only Bleek's !Kun (!Kung) informants who provided a map of a roughly circular arrangement of huts which suggests that this latter settlement type may not have been common among all the Cape 'Bushmen' groups. The linear camp arrangment of Bleek's /Xam informants was apparently only adopted by the !Kung in Botswana a century later (Yellen 1990). The latter phenomenon has been ascribed to changes in the social order as a consequence of the transformation from a hunter-gatherer to a pastoralist society. The fact that the /Xam hunter-gatherers of the Prieska area in the northern Cape also had a linear camp arrangement in the 1870's suggests that Yellen's interpretations are open to debate. It is clear that the historical literature regarding settlement layout does not enable the archaeologist to distinguish between the settlement of a soaqua group and a winter outpost of a Namaqua Khoekhoen group.

The /Xam women were manufacturing clay pots (Bleek & Lloyd 1911) by the nineteenth century and Gordon (Raper & Boucher 1988, plate 69) has shown that they were also using ceramic vessels for the preparation of food in the eighteenth century. According to Bleek and Lloyd (1911), the construction of clay pots entailed certain ritual procedures and it is interesting to note that Wilhelm (in Sydow 1967:27) observed that when !Kung hunter-gatherers attacked an enemy kraal they generally looted the contents first but always smashed the clay pots. The destruction of the pots appears to have had a certain magical significance. It would appear that their ceramic vessels had acquired symbolic importance by historical times not noted among Khoekhoen groups. Sampson (1988), in fact, is examining the Smithfield pottery from the Zeekoe valley

with a view to determing whether the motifs on the pots "*are part of a ritual or belief system* operating above the level of mere socio-political organisation" (1988:173). This is significant since if the manufacture of clay vessels among the /Xam Bushmen did indeed include certain ritual observations, which in turn affected vessel shape and decoration, then this may be interpreted as an 'ethnic' marker.

In the previous chapter I mentioned that the slaughtering process itself can also be considered an ethnic marker. Apart from the material cultural items itemized above it is theoretically possible to distinguish between different identity-conscious social groupings (as well as ethnic groups) from the manner in which they slaughter and process their livestock or game. Historical accounts unfortunately rarely provide the detail required for ethnic distinctions. Compare, for example, Simon van der Stel's description of the manner in which a 'soaqua' group butchered a sheep with that practised by a Grigriqua group (Waterhouse 1932:117, 124). In both cases the descriptions are too vague to be of value to the archaeologist; nevertheless this does not necessarily mean that the faunal component at sites should not be analysed for ethnic markers.

With regard to the position of women, it would appear that /Xam women did not enjoy the same amount of authority enjoyed by the Little Namaqua in historical times. In Solomon's (1989) examination of /Xam texts femininity is portrayed as subordinate and inferior to masculinity. Nevertheless menarcheal girls were held in considerable respect because of the danger they posed to the whole community (or primarily to the men?). Solomon (1989) has also shown that the term "elder sister" occurs frequently in the Bleek records and it is of interest to note that Barnard (1975) has observed among the Hei-//om (Khoe-speaking hunter-gatherers) that on the death of the band headmen the position passes to his eldest sister's son. There seem to be some clues to the rising authority of the eldest sister in hunter-gatherer groups in the northern Cape and Botswana which may suggest that this phenomenon *preceded* the advent of pastoralism.

In chapter 2 I made brief mention of the similarity between Namaqua and /Xam puberty ceremonies for girls, pointing to the manner in which women and rain were linked. I believe these correspondences are not merely co-incidental. It would appear that

women:fertility:rain were interconnected concepts in both these societies; furthermore, I would contend that these concepts probably played a crucial role in the transformation from a hunting-gatherering life style to that which embraced pastoralism. Regarding rain animals and snakes, Schmidt (1979) has concluded that these elements of San belief should be seen within a larger context, as part of a wider African tradition; it would therefore not be surprising to find that the Khoekhoen and hunter-gatherer groups shared beliefs of this nature. The many features in common among various hunter-gatherer groups (such as the !Kung and /Xam) have led some people to talk of 'a pan-San cognitive system'. It is instructive to mention here that Campbell (in Solway & Lee 1990:124) has observed that Tswana rain-making also includes large snakes, rainbulls and eland's fat. Hunter-gatherer and Tswana fables exhibit remarkable similarities. Furthermore, he contends that Tswana "Openness, caring for others within the group, sharing and communal eating of meat of cattle and large animals are all reminiscent of San values". Some facets of Tswana and hunter-gatherer beliefs and customs were borrowed or evolved in proximity, with no certainty today as to who got what from whom. Naturally, assertions of this nature may be correct but they do not explain how this extensive 'borrowing' actually occurred. They do, however, present us with some challenging questions which need urgent attention. Do we continue talking of a pan-San cognitive system or do we start examining a regional belief system common to hunter-gatherers, Khoekhoen and Tswana? More importantly, what are the implications of this broadly based ideology for our analysis of the social relations of each of these societies?

I have done no more than briefly review the historical literature for evidence of the manipulation of material culture items among Khoekhoen and hunter-gatherer groups in order to maintain possible 'ethnic' boundaries. I should like to stress again that between-group boundary maintenance can only be understood once within-group relations have been analysed. For this reason we need to understand how the material culture of hunter-gatherer groups may have been integrated with their social existence. This approach has been explored in considerable depth by Wadley (1986). Drawing on ethnographic accounts relating to the nineteenth century /Xam she has shown how archaeological material may be interpreted through use of ethnographic detail placed within an historical context. It is beyond the scope of this thesis to present all the data

available on this topic; it is sufficient that I point to the many similarities between the Namaqua and hunter-gatherer (/Xam and !Kung) groups during the historical period. Further research is needed to answer the question of whether these similarities result from common origins or long-standing associations with one group borrowing from the other.

DISCUSSION

I have examined the nature of Namaqua social relations in chapter 2 with respect to their ownership of livestock and have shown that the Namaqua placed a high premium on the accumulation of livestock in order to *establish* stock associations with the aim of extending their network of relations and enhancing their own positions of power. In this respect livestock (and other items of material culture) functioned much as *hxaro* does among the Zhu. Just as the creation of a surplus and the loaning out of stock is necessary for the reproduction of pastoralist society, so also does sharing ensure the perpetuation of hunter-gatherer society (Ingold 1986:145). My overview does not claim that no differences in social organisation or ideology existed between hunter-gatherer and pastoralist groups but paints a picture a good deal more complex than is currently portrayed in the literature. In my presentation of Wilmsen's views on reciprocity and sanctions against accumulation among the Zhu I showed how it is possible to stress similarities (as opposed to differences) between stone age pastoralists and hunter-gatherer groups in southern Africa.

The second issue I discuss is whether we can postulate that the Khoekhoen and hunter-gatherer groups could be considered separate ethnic groupings. While the Khoekhoen, or perhaps, rather, individual Khoekhoen 'tribes', could be said to represent differing ethnic groups the term 'soaqua' was, as both Parkington (1984) and Wilmsen (1989) have observed "primarily an epithet of origins with economic connotations" (1989:31). The term 'soaqua' refers to a certain life style and not to an ethnic group of equivalent status to that for example, of the Namaqua (Parkington 1984). Neither did the term 'soaqua' constitute a social group, like that of !Kung or /Xam, claims Wilmsen (1989). The soaqua were hunter-gatherer groups spread throughout most of southern Africa, perhaps speaking different languages, practising

a range of subsistence options and, from an archaeological perspective, exhibiting differing material cultures. So the hunter-gatherer groups of the interior, belonging to what has been called 'the Smithfield tradition', had stone tools and ceramics which differed from ceramic Wilton groups and the informal coastal industries termed the post-Wilton. That the latter stone tool industry post-dated the arrival of pastoralism has already been discussed (Appendix 2). The archaeological record indicates that there were at least two stone-age 'cultural' groupings in southern Africa post-dating 2000 BP. Furthermore, each of these groups exhibited a great deal of variability, so that Sampson (1988) has averred that he is able to detect various contemporary sociopolitical 'Bushmen' groups in the Seacow valley. It is my opinion that all these cultural groups cannot be lumped together as a single ethnic unit and opposed to the Khoekhoen.

One of the most important criteria for membership of an ethnic group is claims of common ancestry. There is very little historical information to suggest that either Khoekhoen or hunter-gatherers considered that they had rights to certain regions or resources by virtue of common ancestry extending back more than a few generations. Nevertheless, Gordon (Smith & Pheiffer 1992) and Kronlein (Bleek 1864) have recorded versions of an origin myth which suggests that they did believe that they shared a common ancestry. Lincoln (1989) has ably demonstrated how important myths may become in the construction of a social identity. They are "a discursive act through which actors evoke the sentiments out of which society is actively constructed" (Lincoln 1989:25). The myth related at the beginning of this thesis follows the general pattern of origin myths: primordial unity followed by an episode of rivalry resulting in enduring social divisions. Like the origin myth of the Maasai and Dorobo (Galaty 1982), the divisions between the Khoekhoen and hunter-gatherers emerged after the former excluded the latter from the acquisition of livestock. This myth was already in circulation in 1779 (Smith & Pheiffer 1992), suggesting that social group formation among the Khoekhoen was already in evidence at this time, but we should *not* infer from this that they considered the historical 'soaqua' to represent a distinct, unified social group in opposition to their own.

If we postulate that immigrant Khoekhoen groups were small in number (the physical anthropological evidence does not support ethnic succession) then one scenario would

be that of assimilation between the formative Khoekhoen and the indigenous population. I have delineated the problems, both economic and social, which an immigrant group would face when entering a new territory. According to this model a separate Khoekhoen identity is likely to have emerged as a *consequence* of several generations of interaction between hunter-gatherer groups and those relying on pastoralism. The Khoekhoen, or various Khoekhoen tribes, would apppear to have constituted a specific ethnic group by the seventeenth century.

Ethnographic data from contemporary hunter-gatherer groups in the Kalahari and Botswana, on the other hand, suggest that those groups living in the Cape Province during the last 2000 years would have had band identities. They may even have recognised all those bands within a specific territory as family or potential relatives but they had no concept of a 'soaqua' group identity extending across the entire Cape Province. Like Parkington, I propose that hunter-gatherer groups may only have been defined in terms of a range of criteria which comprised the structural opposite of the Khoekhoen; in other words, not having *sustainable* herds, not having matjies huts, not having a range of decorative items, etc.

I would suggest that the pronounced 'ethnic differences' noticed by early travellers between Khoekhoen and hunter-gatherers during the seventeenth and eighteenth centuries could be interpreted as arising from increasing competition for diminishing livestock numbers. In other words increasing 'ethnic' differentiation between the Khoekhoen and hunter-gatherers arose as a *result* of European intervention and disruption of indigenous trade networks in livestock. Hunter-gatherers who may previously have been permitted to obtain breeding stock were now excluded because Europeans were able to pay higher or more desirable prices. As less livestock became available, hunter-gatherers were forced to resort to conflict to obtain stock, previously more widely distributed. Conflict resulted in greater we/they distinctions with the concomitant emphasis on 'ethnic' differences. The Khoekhoen stressed those qualities which set them apart from the 'soaqua' as being access to stock and the outward expression of wealth in stock, namely fat. The hunter-gatherers, on the other hand, defined themselves in terms of a greater reliance on game, etc.

There are many examples from the historical records of how more powerful groups manipulated ethnic distinctions to suit their particular purposes during the colonial period: so the Surveyor-General reported in 1855 that Baster groups had moved into the Richtersveld and expropriated the pasture of weaker groups such as T'Kamghaap (whom Klinghardt says were clearly Nama) by stereotyping these weaker groups as 'Bushmen' in order to impress the legitimacy of their claims on missionaries and Government officials (Carstens *et al.* 1987:143).

The fact that in many cases pastoralist and hunter-gatherer spoke the same language, namely Khoekhoen, is further proof that being a Khoekhoen or a 'soaqua' consisted of hierarchical 'nested' social identities. In some cases hunter-gatherers regarded themselves as Khoekhoen, i.e., they spoke the same language, practised similar rituals, had similar social formations, but they could emphasise differences when the need arose. In other words social boundaries may have been quite fluid in the period immediately preceding the arrival of the first European settlers, with both Khoekhoen groups and hunter-gatherers manipulating identities as the need arose.

The alternative model is that of two separate ethnic groupings living alongside one another for 2000 years with no noticeable assimilation taking place. This would have occurred, claims Smith (1986), because the Khoekhoen were in a position of relatively greater political authority. If conflict did arise in the precolonial period and the Khoekhoen did exert their hegemony over hunter-gatherers in the form of clientship relations we would expect these two societies to define themselves outwardly with respect to each other. Can we identify two distinct cultural groupings in the archaeological record? Smith *et al.* (1991) claim that they are able to do so for the western Cape and in the chapters which follow I attempt to test whether a similar situation pertained to Namaqualand. I have shown that it is not enough that cultural variablity be proved; we need to distinguish cultural symbols which were used to structure *within*-group relations (i.e., between men and women) from items displaying between-group relations. This issue forms the basis of the chapters which follow.

5. ARCHAEOLOGICAL RESEARCH IN CENTRAL NAMAQUALAND

In the following two chapters I present the results of archaeological fieldwork undertaken in Namaqualand. Although I have followed a social approach in this thesis, this chapter also examines those environmental factors which have been observed to influence pastoral land-use in Namaqualand, both past and present. This should not be interpreted as indicating that I believe that the particular form of social organisation exhibited by the Little Namaqua is the result of adaptation to their environment. Nevertheless, there are seasonally determined requirements for herders to disperse and periods in which they aggregate and this of necessity will have bearing on our interpretation of archaeological material. A brief description of the topographic and ecological nature of the region is provided and I discuss how pastoralists in this region are at present constrained to follow a certain cycle of seasonal transhumance. I also show how this model is supported by both historical data (Appendix 3) and ethnographic material collected during the nineteenth century.

The magisterial district of Namaqualand comprises an area of approximately 50 000 sq km bounded to the north by the Orange River, to the west by the Atlantic Ocean and to the south and east by the districts of Van Rhynsdorp, Calvinia and Kenhardt. The Namaqualand area (with the exception of the Richtersveld) may be divided into three broad zones which are, from west to east, the Sandveld, the mountains and the Bushmanland plateau. In this chapter, the archaeology of the central Namaqualand area is presented while the archaeology of western Bushmanland and the Richtersveld is discussed in the following chapter. Archaeological sites have been investigated in each area (Fig.2).

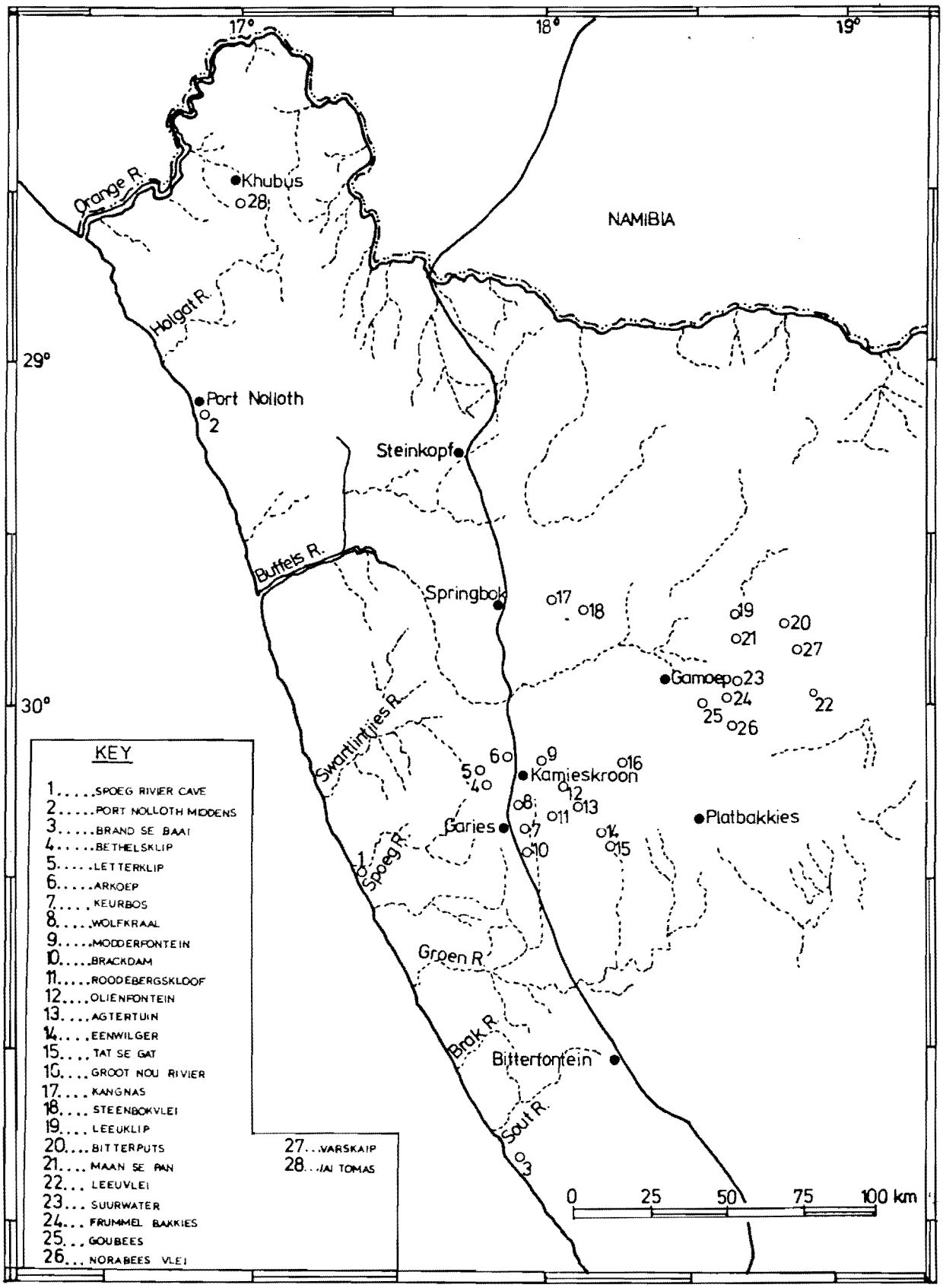

Fig. 2. The location of archaeological sites mentioned in the text.

ARCHAEOLOGICAL EXCAVATIONS

An attempt to develop a pastoralist archaeology in Namaqualand was initiated by Robertshaw in 1974 but was soon abandoned because he was unable to locate suitable sites for his project. He investigated the Lower Orange River valley, the western Richtersveld, the eastern slopes of the Kamiesberg as well as western Bushmanland, in the process recording a number of sites (Robertshaw unpublished) although none had the potential for providing information on pastoralist settlement. For this thesis, an intensive survey of the Kamiesberg region was undertaken during a two-month period in 1987. At least 40 sites were recorded (Fig.2) but few suggested any archaeological potential. There would appear to be a number of reasons for this. Extensive dry land wheat cultivation has been undertaken on all available level land in the Kamiesberg during the last 200 years with the result that it is extremely rare to recover even a handful of potsherds from this area today. Modderfontein, discussed later in this chapter, is an example of this. Small shelters next to granite boulders, such as Arkoep, contain very shallow deposits and ephemeral occupation remains. Indeed, the excavation of Wolfkraal in 1983 produced what would appear to be typical material from this type of site. Large caves, such as Keurbos, discussed below, are extremely rare, yet do not appear to have attracted human occupation. Evidence for human settlement may frequently be traced next to large boulders, such as Bethelsklip (Webley 1984) and /Ai tomas (this thesis). Open sites, such as Frummel Bakkies, are the norm in Bushmanland and although they may produce large collections of artefacts they also present the archaeologist with many problems of context.

THE ECOLOGY OF THE COASTAL BELT

The coastal strip of the Sandveld consists of thick aeolian and marine sediments overlying older granite-gneisses. The coastal strip features many wave-cut rocky platforms separated by small isolated beaches. The topography rises steeply in most places from the coast to the coastal plain (Parkington pers. comm.). The undulating inland area is covered with vegetated sand dunes aligned roughly parallel to the prevailing wind direction, which is north-south. The average annual temperature along the coast is approximately 15 degrees C with a small range due to the marine influence.

The west coast experiences a Mediterranean-type climate with hot dry summers and rain during the winter months (May to July). Rainfall decreases from south to north (Fig.3), with an annual average of 150 mm at the Berg River and 50 mm at the Orange River. Rainfall also increases from west to east: Wallekraal, a mere 20 km from the coast, receives an annual rainfall of only 99,1 mm while Kamieskroon, in the foothills of the Kamiesberg receives 211,1 mm a year. Fog occurs very frequently along the coastal belt and, together with heavy dew-falls, is believed to supplement the low rainfall, thereby benefiting the succulent vegetation. The vegetation along the coast has been identified as Strandveld (Fig.4) and is particularly sensitive to disturbance because it is subjected to heavy winds, salt spray and drift sands. It is a naturally fragile ecosystem which is easily disturbed or destroyed. Heavy grazing has resulted in a lower cover and an increase in the annual species. Any disturbance of the plant community leads to wind erosion which can result in the destabilization of the dunes. At present only small stock are herded along the coastal belt as there is insufficient grazing and standing water for cattle particularly during the dry summer months.

THE ARCHAEOLOGY OF THE COASTAL BELT

Spoeg River Cave

The Spoeg River is a perennial river which flows into the Atlantic ocean just south of Hondeklipbaai. A sandbar at the mouth of the river, which is only broached during periods of extreme flooding, has led to the formation of a small lagoon. The low salinity measurements for the lagoon have been ascribed to groundwater seepage but salinity measurements have been shown to vary with rainfall and during late summer the water in the lagoon is quite unpalatable. A substantial water body is apparently maintained in the lagoon even in dry periods, allowing a wide diversity of plant and animal life to be supported. The cave itself is situated on the southern bank of the Spoeg River, about two kilometres from the mouth, and overlooks the lagoon. It is situated some 5 m above the river bed and it is apparent that the river has not flooded the cave during the course of the last 2000 years. The cave faces directly northward into the wind and rain experienced during the months June to August. The vegetation in the vicinity of the site is Strandveld Proper (Acocks 1975) or open semi-succulent

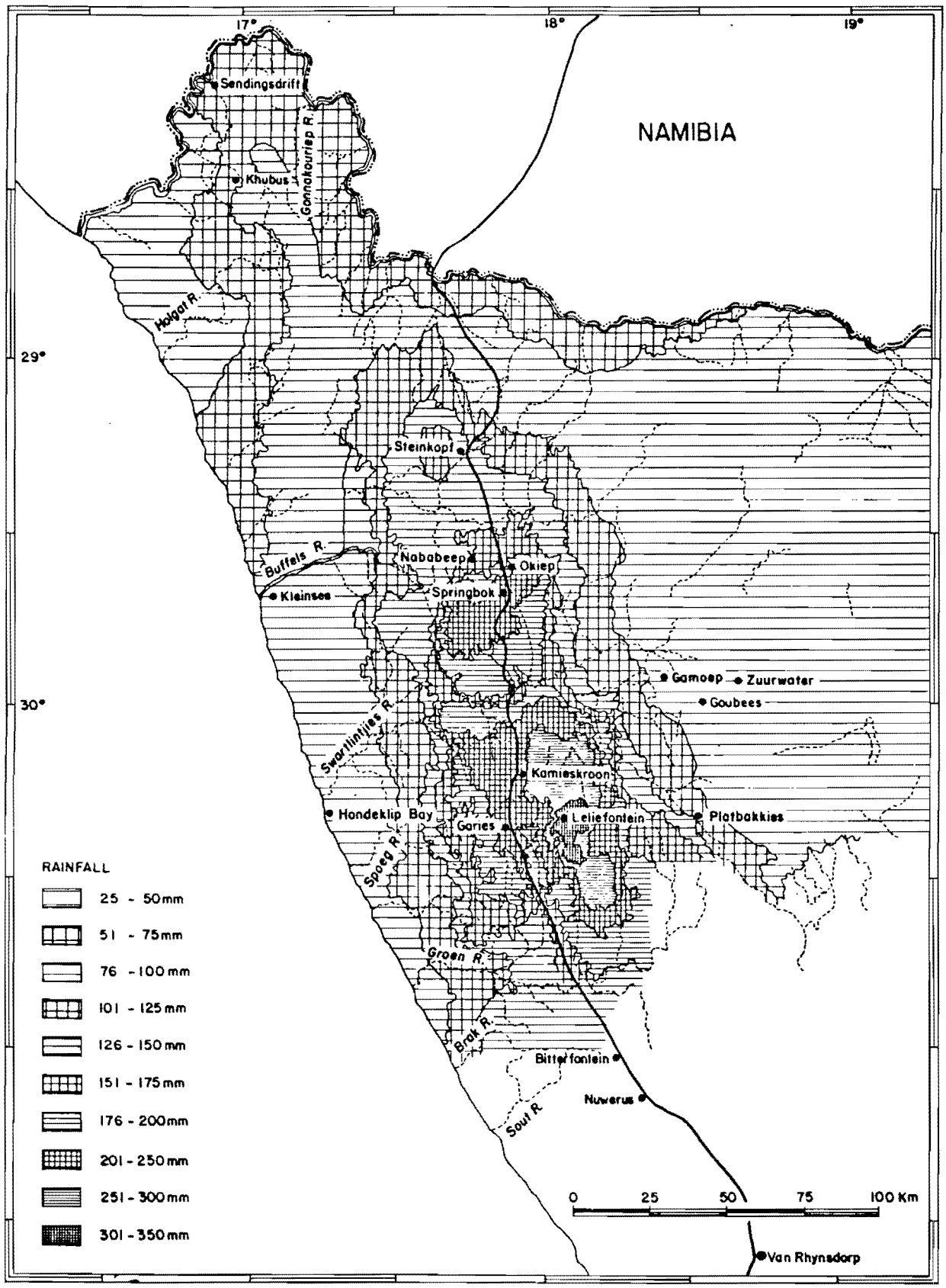

Fig. 3. Rainfall distribution in Namaqualand. Information provided by the Department of Agriculture, Springbok. (Drawing by courtesy of Fiona Archer).

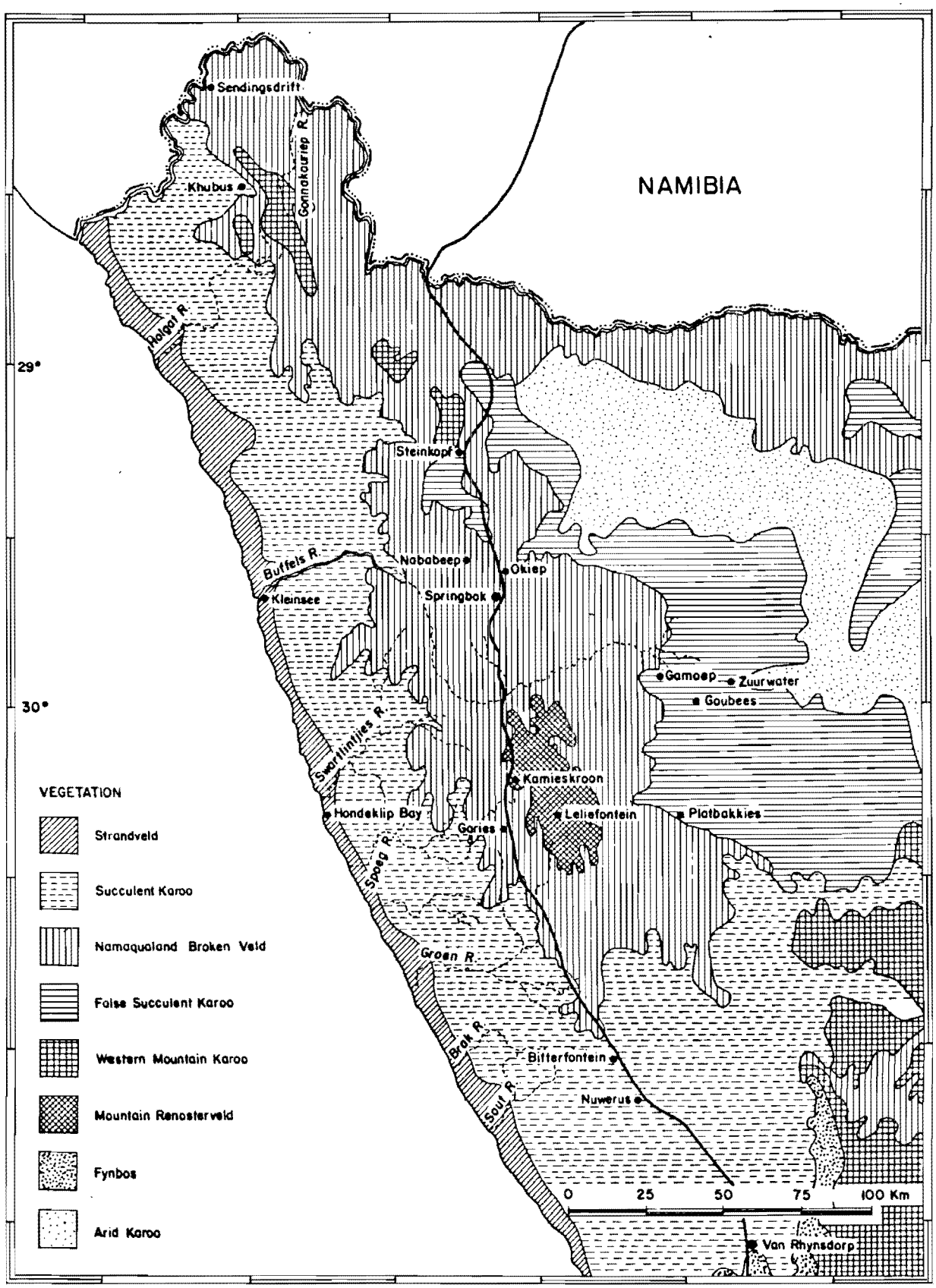

Fig. 4. A vegetation map of Namaqualand, after Acocks 1975. (Drawing by courtesy of Fiona Archer).

scrub. Very little is known of the fauna of the area, but an ECRU survey (Grindley & Heydorn 1981) observed Cape fur seal, porcupine, steenbok, grey duiker, bat-eared fox, water mongoose, red meerkat and various rodents in the vicinity of the estuary.

Excavation: although the site is situated on the banks of the river, preservation of plant remains and crayfish mantles is remarkable which would indicate that even in times of flooding water did not penetrate the cave. Two square metres were excavated to bedrock, reached at 110 cm (Fig.5). Twelve stratigraphic units,comprising interdigitating layers of shell, ash,plant remains and brown soil were recognised in square C9 (Fig.6). A considerable number of small hearths (in excess of 20 in the two squares) were distributed throughout the sequence. A further three stratigraphic units were identified in B8 indicating spatial use of the cave. A further 1,0 x 0,2 m column (D9) was removed, sieved and bagged for identification of the marine fauna.

Faunal and cultural material, discussed below, suggest that units FBS, Shelly Patch 1 & 2 and Brown be combined to form the first phase of occupation. Hearth 12 in Shelly Patch, at 91 cm below the surface, has been dated to 1920±40 BP (Pta-4745). Included in this phase is unit Grass 2, which appears to a bedding unit and was only recovered from the back square. It has been combined with Shelly Patch for analytical purposes. The second phase of occupation includes units Ashly Brown, Shelly Brown, Ashy Soil and Patella and remains undated. Unit Grass 1 in the back square has been combined with Ashly Brown. Immediately above Patella in square B8 is an extensive accumulation of coprolites and bones showing signs of attack by digestive juices confirming that the cave functioned as a brown hyaena (*Hyaena brunnea*) maternity den. Sandwiched between units Patella and Coprolite is a thin microfauna lens, further evidence for a hiatus in human occupation of the site. Samples of the microfauna from all the units have been analysed by D. M. Avery of the South African Museum and are discussed below. Archaeological material from unit Coprolite has been combined with those of Phase 2 as the material probably relates to hyaena scuffling of the Patella layer. Finally Phase 3 consists of BS1 & 2, Twiggy, Unit 1 and Surface unit. Hearth 3 in Twiggy at 20 cm below the surface has been dated to 1390 ±50 BP (Pta-4753). Square B8 contains thick wads of what appears to be bedding material, of which bulk samples were collected for analysis.

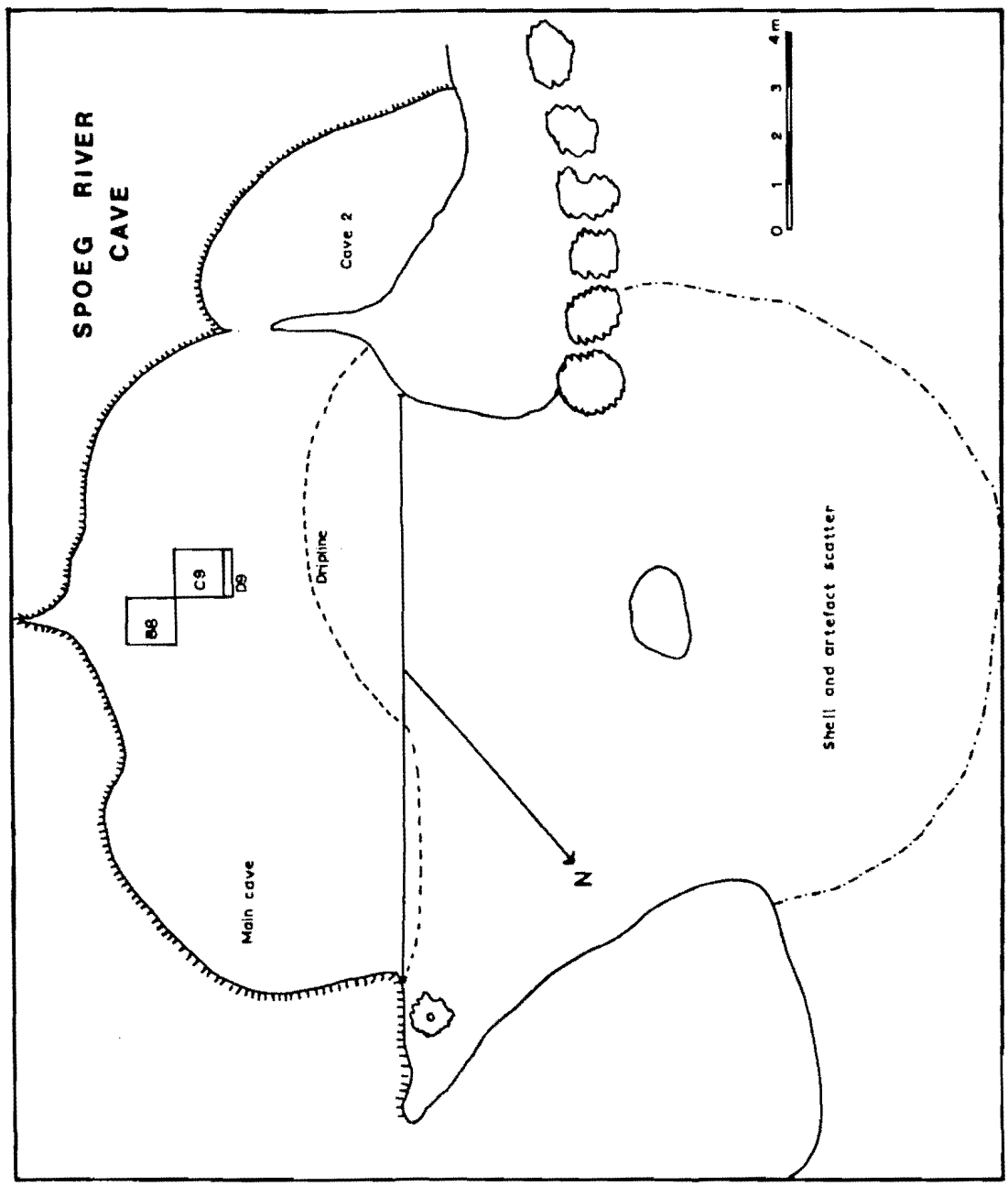

Fig. 5. The floor plan of Spoeg River Cave.

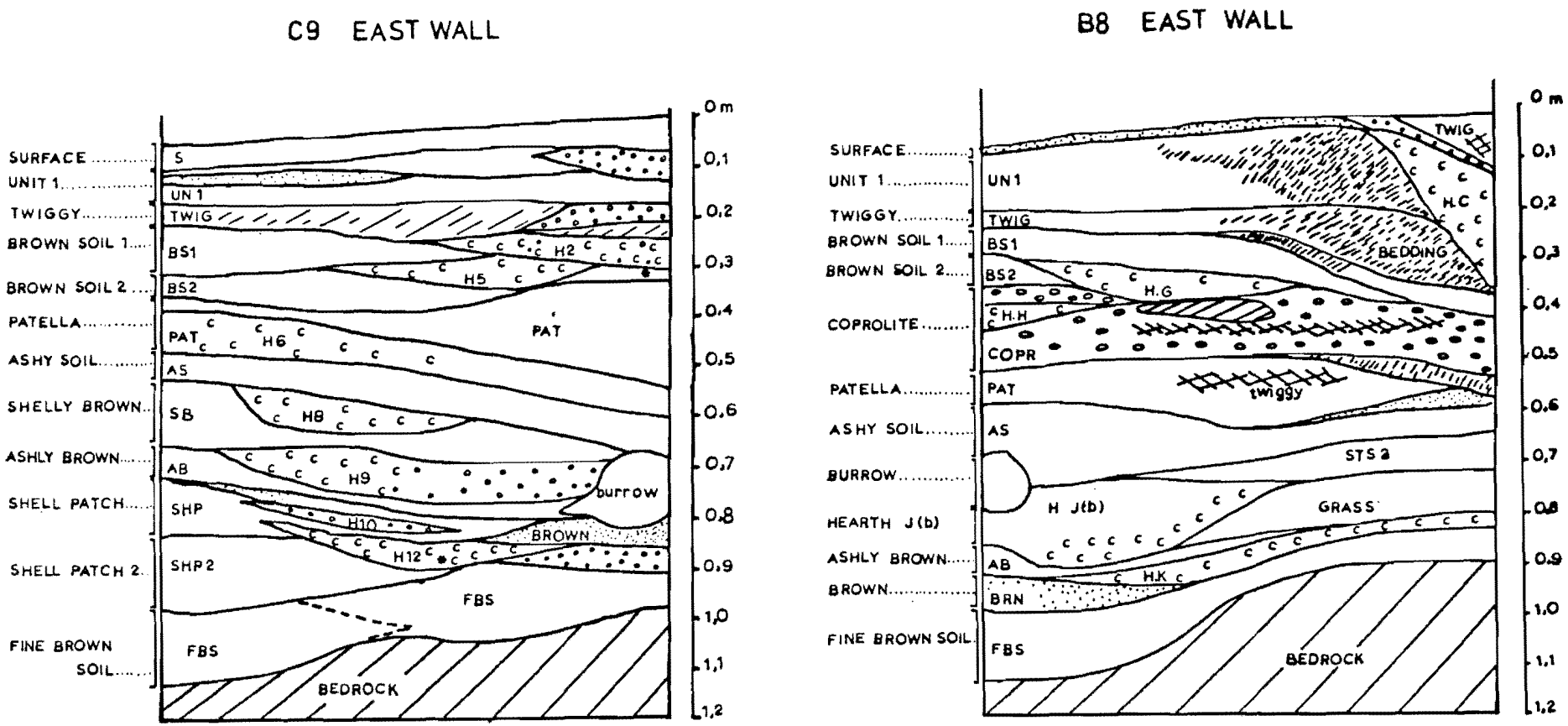

Fig. 6. The east-facing section of B8 and C9 at Spoeg River Cave.

Both dates obtained from the excavation are significant. The upper date comes from very close to the surface yet dates to 1390±50 BP, i.e., there is no evidence for post-1000 AD occupation, which is quite unlike any of the other sites excavated for this thesis but a date from the surface unit is clearly needed. The lower date of 1920±40 BP is clearly associated with pottery and sheep. This has far-reaching implications for the current investigation into Khoekhoen origins and routes of dispersal.

Palaeoenvironmental Indicators

An analysis of the microfauna (probably introduced to the site by barn owls) has confirmed observations made by Tyson (in press) off the coast of Walvis Bay in southern Namibia. There is evidence for cooler, wetter conditions ca. AD 100 to 200, after which there is a warmer, drier episode from AD 250 to 600. The data from the basal five units (Table 2) indicate that "general diversity is lower, as is species richness; proportions of grass are higher while those of scrub are rather lower; and dunes are better represented" (Avery in press). Avery has interpreted these data to confirm that rainfall was higher with less pronounced summer aridity around 1920±BP. Thereafter there are indications of deteriorating conditions with a decline in the percentage of grasses around the site; unit Ashly Brown/Coprolite in particular suggests a period of stressed conditions.

Cultural Material

Lithics: stone artefact numbers are extremely low (Table 3), only 1 187 being recovered from 213 buckets, or 2,2 cubic metres of deposit. There are only 22 formal tools, which amounts to 1,8% of the assemblage. However, lithic artefact concentrations and formal tools peak in the basal three units or Phase 1 of the occupation of the site. Formal tools amount to 3,2% of this assemblage and there are 9,8 artefacts per bucket. Formal tools amount to only 1,0% of the artefact total in Phase 2 and artefact concentrations drop to 4,3 artefacts per bucket. This is comparable to the 0,9% formal tools in Phase 3 and artefact concentrations of 4,5 artefacts per bucket. There is clearly a drop in formal tools and artefact concentrations soon after Unit Brown. Formal tools include mainly scrapers, and miscellaneous retouch pieces (MRPs) as well as segments and two backed pieces. There are no adzes. With respect to the scrapers, those from the lower units are very wide, i.e., width/length ratios are in the order of 180. There

Table 2. Spoeg River: Micromammalian species list with MNI percentage representation in different phases (after Avery, D.M. in press).

Species List	English common name	Phase 3	Phase 2	Phase 1
Myosorex varius	forest shrew	3,8	4,9	4,3
Crocidura flavescens	greater musk shrew	7,5	7,1	4,3
Crocidura cyanea	reddish-grey musk shrew	1,9	0,5	-
Suncus varilla	lesser dwarf shrew	3,8	1,7	4,3
Eremitalpa granti	Grant's golden mole	1,9	6,1	6,1
Bathyergus janetta	Namaqua dune molerat	3,8	3,9	2,1
Cryptomys hottentotus	common molerat	-	0,2	-
Parotomys brantsii	Brants's whistling rat	-	3,2	2,1
Otomys saundersiae	Saunders's vlei rat	-	3,7	4,3
Otomys irroratus	vlei rat	-	0,2	-
Otomys unisulcatus	bush Karoo rat	45,3	35,3	34,0
Gerbillurus paeba	hairy-footed gerbil	5,7	11,3	6,4
Mystromys albicaudatus	white-tailed rat	9,4	3,4	6,4
Dendromus melanotis	grey climbing mouse	-	0,2	-
Steatomys krebsii	Kreb's fat mouse	1,9	3,4	4,3
Rhabdomys pumilio	striped field mouse	11,3	9,8	8,5
Mus minutoides	pygmy mouse	-	0,2	-
Aethomys namaquensis	Namaqua rock mouse	-	0,2	-
Graphiurus ?platyops	rock doormouse	-	0,2	-
Macroscelides proboscideus	round-eared elephant-shrew	-	1,2	6,4
Elephantulus rupestris	Smith's rock elephant-shrew	3,8	2,9	6,4
MNI Totals		53	408	47

Table 3. Spoeg River: Lithic artefact inventory.

	SUR	UN1	TWIG	BS	COP	PAT	AS	SBRN	ASBN	BRN	SHP	FBS	
VOLUME (buckets)	10	24	16	27	16	21	19	17	17	14	13	21	
Chips	10	15	10	12	-	14	20	20	27	57	41	35	
Chunks		9	34	12	14	4	10	15	16	8	21	13	11
Flakes	14	53	21	36	13	35	43	28	37	81	59	75	
Bladelets	-	1	-	1	-	-	-	-	1	1	-	-	
Cores	5	7	6	9	4	14	9	5	3	10	15	20	
P.esq.	1	1	-	1	-	1	-	-	-	-	-	-	
Lithic Man.	4	17	13	25	5	10	6	13	4	6	3	2	
Total	44	128	62	98	26	84	93	82	80	173	131	143	
Utilised Flakes	-	2	-	-	-	3	-	-	-	-	-	-	
Ground Cobbles		-	2	1	1	1	3	2	-	-	-	-	-
Hammer-stones	-	1	-	-	1	1	-	-	-	-	-	-	
Total	0	5	1	1	2	7	2	0	0	0	0	0	
Scrapers		-	-	-	1	-	1	-	1	-	3	1	-
Segment		-	-	-	-	-	-	-	-	-	3	1	-
Backed Flake	-	-	-	-	-	-	-	-	-	-	-	1	
B. Blade		-	-	-	-	-	1	-	-	-	-	-	-
MRP	-	1	1	-	-	-	-	-	1	1	3	2	
Total	0	1	1	1	0	2	0	1	1	7	5	3	
% Formal Tools	0	1,5	1,5	1	0	2	0	1,2	2,5	4,9	4,3	2	
Grand Total	43	134	64	100	28	93	95	83	81	183	136	146	

are very few utilized flakes but this may be related to the difficulty in recognising damage on quartz, the most abundant raw material. Several flaked quartzite cobbles may have functioned as upper grindstones but have no apparent grinding surfaces. At least three of these cobbles are ochre-stained. Utilised lithics are most abundant in Patella unit, but there are no grinding stones beneath this unit.

Although there are small numbers of silcrete and chalcedony formal tools in Phase 1 the majority of the formal tools in Phases 2 and 3 are on quartz. Thus, although formal tool numbers are low there is a definite trend toward increasing use of quartz. Approximately 80% of the artefacts in all units are made on quartz (Table 4). Second in frequency is quartzite, followed by chalcedony, silcrete and granite. There are several large pieces of mica in Phase 3 (the significance of this to be discussed later), three quartz crystals (two in Phase 1) and a fragment of specularite in BS2.

If one examines artefact concentrations for each square individually, then it is apparent that numbers increase toward the front of the cave. Low artefact numbers from the site may well be ascribed to the location of the excavation trench, which sampled the bedding units in the rear of the cave rather than possible activity areas further to the front.

Bone artefacts: several bone artefacts were recovered (Fig.7). A fragment of a tortoise-shell bowl and a bone point were found in Twiggy. Broken bone points were recovered from Patella and Shelly Brown, a linkshaft from Ashly Brown and a bone tube bead from Shelly Brown. A sawed and snapped bone tube from BS1 indicates that the manufacture of bone implements probably took place on site on occasions.

Pottery: the small sample of 141 potsherds included two rims and four decorated fragments (Table 5). Potsherd density amounts to 56,4 sherds per cubic metre. Sixteen sherds were recovered from Phase 1, 39 from Phase 2 and 86 from Phase 3. There are nine potsherds in units dating to 1920$\pm$40 BP and lower making it unlikely that they may have resulted from post-depositional displacement. There are three sherds decorated with incised horizontal lines and one sherd with small circular impressions (Fig.8). These sherds only occur in Phase 3. There are no lugs or other diagnostic

Table 4. Spoeg River: Lithic raw materials.

	SUR	UN1	TWIG	BS	COP	PAT	AS	SBRN	ASBN	BRN	SHP	FBS		
Waste														
Quartz	35	103	52	81	19	75	77	69	66	150	104	124		
Qzte.	7	5	1	8	1	3	4	5	3	14	3	2		
Granite		-	8	3	3	2	-	3	1	2	-	1	3	
Chal.	-	-	1	2	-	2	4	3	3	8	16	6		
Sil.	-	1	-	1	-	2	5	3	3	3	5	7		
Other	1	1	3	1	4	2	-	1	3	1	-	-		
Curated		1 M	10 M	2 M	1 S/1 C								1 C	1 O
Total	44	128	62	98	26	84	93	82	80	173	131	143		
Utilized														
Quartz	-	3	1	-	1	3	1	-	-	-	-	-		
Qzte.	-	2#	1	1	-	1	-	-	-	-	-	-		
Granite		-	-	-	-	1	1	1#	-	-	-	-	-	
Sil.	-	-	-	-	-	-	-	-	-	-	-	-		
Chal.	-	-	-	-	-	2	-	-	-	-	-	-		
Other	-	-	-	-	-	-	-	-	-	-	-	-		
Total	0	5	1	1	2	7	2	0	0	0	0	0		
Formal														
Quartz	-	1	1	1	-	2	-	-	1	5	3	3		
Chal.	-	-	-	-	-	-	-	1	-	2	-	-		
Sil.	-	-	-	-	-	-	-	-	-	-	2	-		
Total	0	1	1	1	0	2	0	1	1	7	5	3		
Grand Total	44	134	64	100	28	93	95	83	81	183	136	146		

Ochre stained

* M=Mica, S=Specularite, C=Quartz crystal

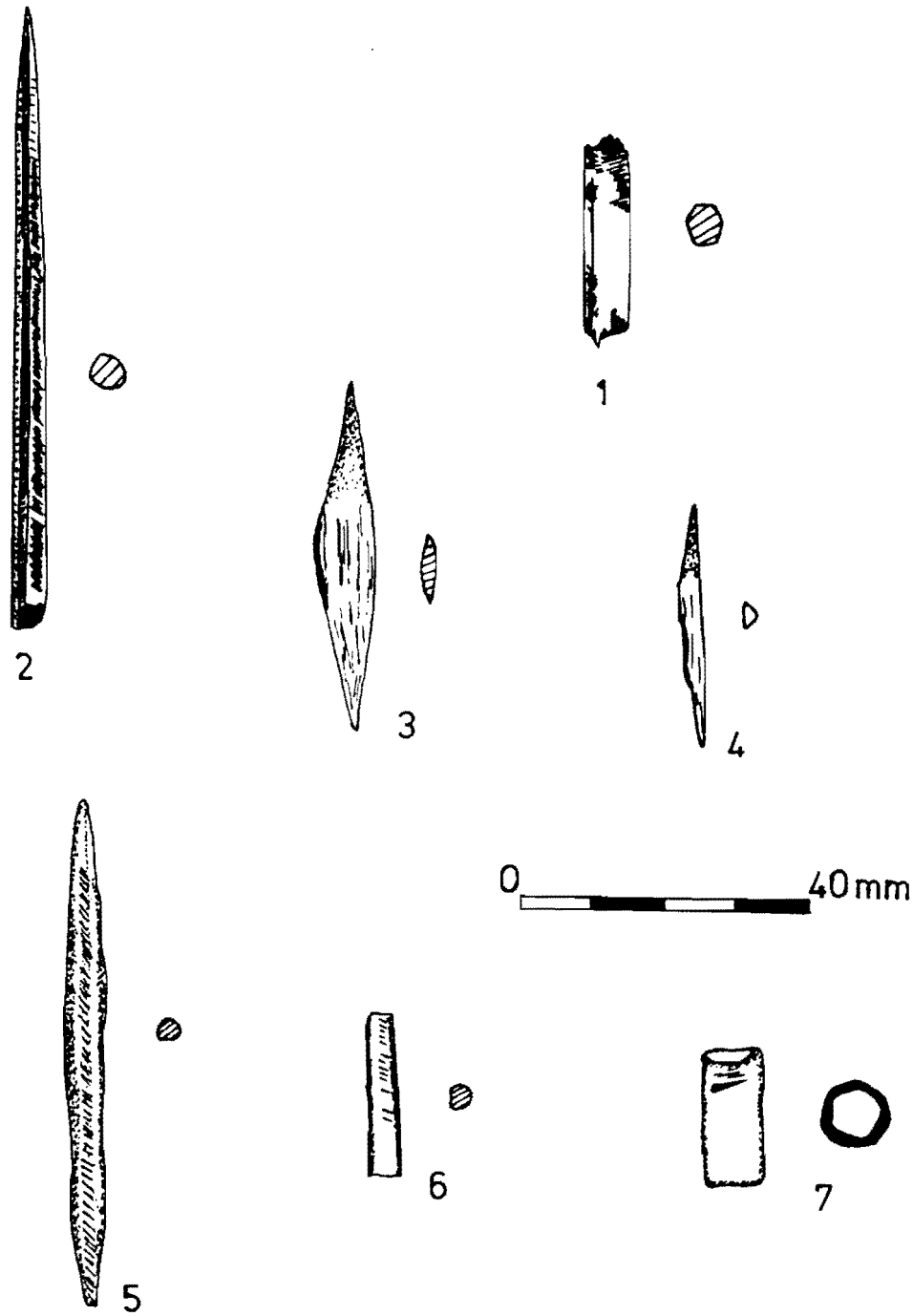

Fig. 7. Bone artefacts from Spoeg River Cave: 1 = BS1 Hearth E; 2 = Unit 1 Bedding Pit; 3 = B8 Unit 1; 4 = B8 Twiggy; 5 = B8 Ashly Brown; 6 = C9 Shelly Brown; 7 = B8 Shelly Brown.

Table 5. Spoeg River: Pottery frequencies, sherd measurements and potsherd densities per unit.

	TOTAL	RIMS	DECORATION	MEAN THICKNESS MM	% POTTERY	SHERDS PER BUCKET
SUR	6		1	5,4 mm	4,2	0,6
UN1	43		1	5,4 mm	30,4	1,8
TWIG	19		1	5,3 mm	13,4	1,2
BS	18		1	5,6 mm	12,7	0,6
COP	11			5,9 mm	7,8	0,6
PAT	4			3,9 mm	2,8	0,2
AS	6			4,9 mm	4,2	0,3
SBRN	11	2		5,0 mm	7,8	0,6
ASBN	7			5,1 mm	4,9	0,4
BRN	7			4,7 mm	4,9	0,5
SHP	4			5,0 mm	2,8	0,3
FBS	5			5,4 mm	3,5	0,2

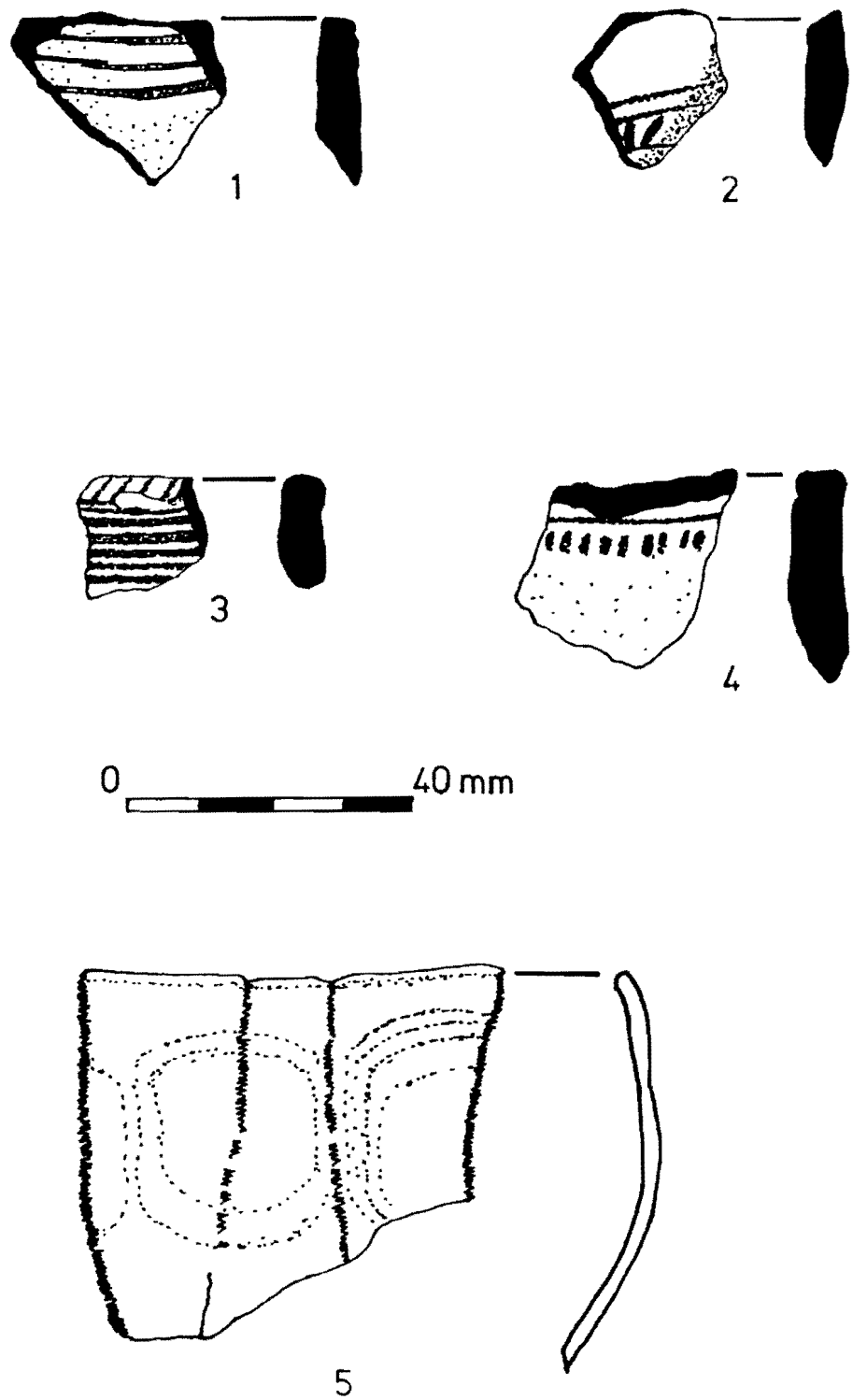

Fig. 8. Diagnostic pottery and a tortoise shell bowl from Spoeg River Cave: 1 = BS1; 2 = Surface; 3 = Hearth 2; 4 = Twiggy; 5 = Twiggy Lower.

features and the pottery is generally fine-grained with a quartz temper. Sherds recovered from above Coprolite are generally slightly thicker than those below it (Table 5). Furthermore, a large number of the sherds of Unit 1 (Phase 3) consisted of only the outer slip of the sherd, the interior having broken away. It would appear that the pottery may not have been properly fired for this to have occurred.

Decorative items: ostrich eggshell (OES) beads are fairly evenly distributed throughout the sequence, with a small peak in Unit 1, Ashy Soil and Shelly Brown (Table 6). There are very few unfinished beads and they occur almost entirely in Brown and Shelly Patch, suggesting that bead manufacture may have taken place on site around 1920±40 BP and shortly thereafter. However, the excavation did not produce any borers or grooved stones. The internal diameter as well as the aperture measurements of the beads were measured by Yates (Fig. 9) and the results are discussed in chapter 7. Four ochre stained beads were identified, all from Phase 3, and one fragment of OES from Twiggy also contained an ochre mark. In addition to the OES beads there are also four seed beads, all from in Phase 3. One cowrie shell was recovered but it cannot be definitely identified as originating on the Cape east coast.

Dietary Information

Plant Remains: the remarkable preservation of organic remains at Spoeg River places it together with Elands Bay Cave and Nelson Bay Cave as one of few coastal shell middens to yield sufficient plant remains to infer the importance of plants at the coast (Wilson 1990). Unit 1 in Square B8 is composed almost entirely of grass, two large bulk samples were removed for further study. The grass seems to dip down considerably toward the back of the cave (Twiggy Lower) lending credence to its interpretation as a bedding unit. The grass appears to be *Cynodon dactylon* (E. February pers comm.). Further 'bedding units' appear in Grass and Grass 2.

Some of the bulk samples from Twiggy produced pieces of matjiesgoed or *Scirpus* sp. commonly used to make mats for the huts in Namaqualand. No matting was recovered and it is possible that the reeds were plucked together with other sedges for bedding. A pit filled with the outer cases of several hundred large berries was recovered in Twiggy. These large berries were found in varying quantities in a number of other

Table 6. Spoeg River: ostrich eggshell pieces and beads.

	GRAMS OES	% OES	BEADS	INCOMPLETE	BROKEN	OTHER NOTES
SUR	47,7 g	5,2	7	1	3	-
UN1	485,9 g	52,9	19	2	-	1 seed bead
TWIG	155,2 g	16,9	6	2	2	1 seed bead
BS	53,0 g	5,7	8	11	-	1 seed bead, 1 ochre bead
COP	1,1 g	0,1	1	-	-	-
PAT	62,4 g	6,7	2	-	-	-
AS	4,9 g	0,5	11	1	2	-
SBRN	8,6 g	0,9	17	-	1	-
ASBN	10,5 g	1,1	4	-	1	-
BRN	36,8 g	4,0	10	10	-	-
SHP	13,5 g	1,4	10	3	1	-
FBS	36,6 g	4,1	12	-	1	-
Total	916,2 g		107	30	11	

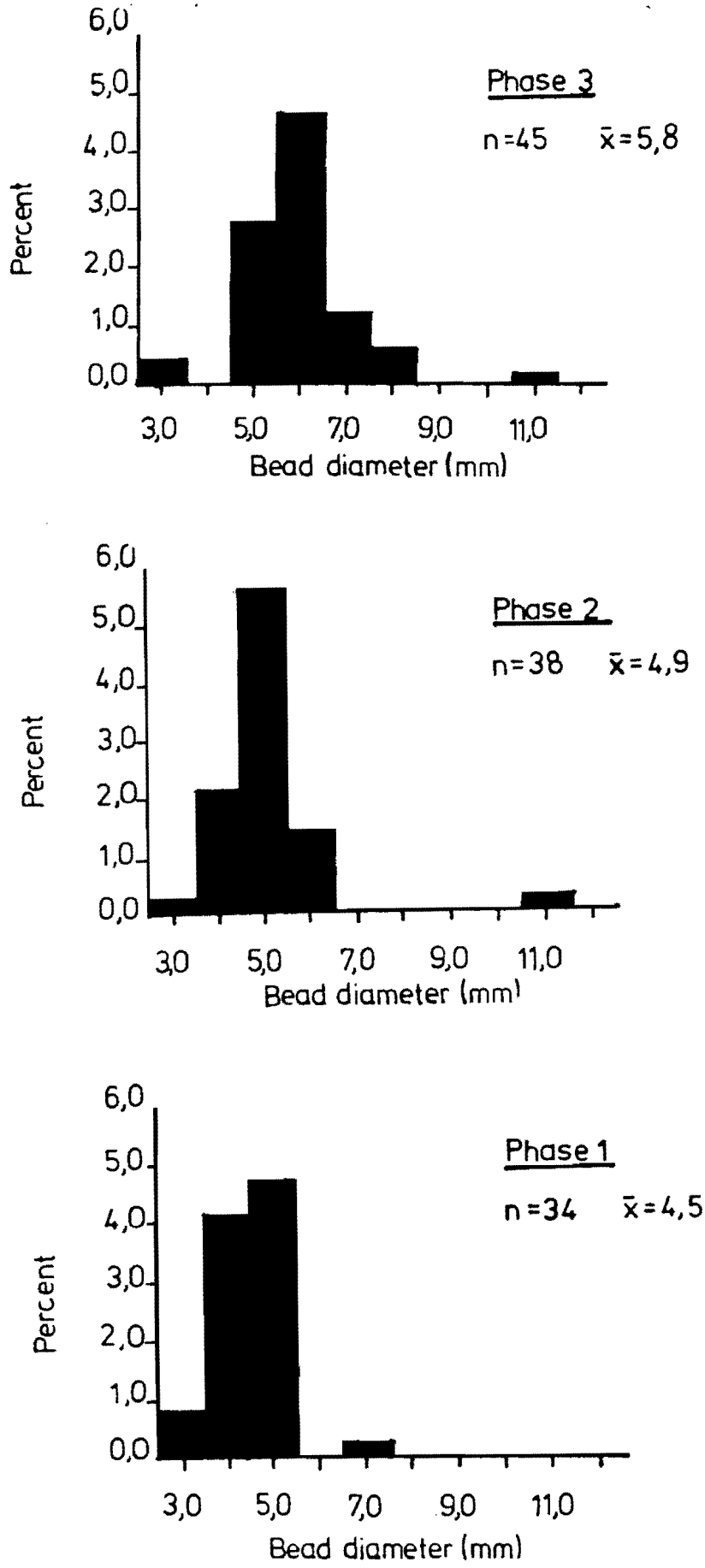

Fig. 9. Spoeg River percentage of mean bead diameters in Phases 1, 2 and 3.

units. Thus far we have been unable to identify them. Two other berry types were also recovered, namely *Rhus* sp. and *Euclea tomentosa*. A few seeds of a fourth, as yet unidentified seed, was also recovered. A few corm casings and corm bases were also recovered but it appears that they occur in such low numbers that they do not appear to have been as important to the occupants of the site as the berries.

A few dried flower heads (Mesembryanthemaceae) clearly support the evidence provided by the other plant remains, namely, that during phases 2 and 3 the site appears to have been occupied predominantly in the spring and summer months. A large wad of *Boophane disticha* was recovered from Grass and Twiggy. Its presence is interesting as it is not currently used by the local residents of the 'coloured' reserves in Namaqualand. A number of well-preserved leaves of a distinctive type were found in BS1, Twiggy and Twiggy Lower. Although it is possible that they may have been blown into the site it is remarkable that they all appear to belong to the same species; it has been suggested that they may have had some medicinal function (F.Archer pers. comm.).

In addition to these plant remains, a wad of antelope hair, a twisted piece of leather, the thickness of a 'riem', and numerous fragments of cordage of varying thicknesses were recovered. The strings comprise two strands and are of plant fibre. No examples of netting, however, were recovered and the function of the cordage must remain speculative. Six pieces of cordage, of four different thicknesses, were recovered from Grass, one from CBS (equated with unit Ashy Soil) and one from Twiggy Lower. Several very large pieces of kelp or sea bamboo were recovered from Twiggy and STS2 (equated with unit Shelly Brown). Both *Ecklonia* sp. and *Macrocystis* sp. are reported to form dense thickets below the low-tide level along the Atlantic coast. Wilson (1990) remarks that the giant kelp (*E. maxima*) was used for the storage of train oil (Moodie 1960: 27,37) and one of the fragments had clearly been cut indicating that it could have been used as a container. Many fragments of seaweed were also found, they may have been introduced while attached to the molluscs although it is equally possible that they may have formed part of the diet.

Crayfish: a large number of crayfish (*Jasus lalandii*) mandibles as well as carapace fragments were recovered from the excavation. The MNI of 357 was measured for mean carapace lengths, varying between 70 and 100 mm, although the largest individual specimens measured up to 140 mm (Table 7). Heavy exploitation of the smaller individuals (less than 95 mm) may suggest over-predation (Grindley 1967). Exploitation appears to have been particularly heavy in Unit 1, Twiggy and BS and again in Patella, Ashy Soil and Shelly Brown (Fig.10). Very few crayfish are represented in the lower units but they tend to be the bigger individuals (greater than 100 mm). The relatively heavy predation of crayfish in unit Shelly Brown coincides with a switch from the exploitation of both mussels and limpets to a reliance on almost only limpets. Crayfish occur in great numbers along the entire west coast despite heavy commercial exploitation. The high frequency of crayfish in the deposit suggests that it formed an important component of the diet from unit Shelly Brown onward.

Shellfish: the Namaqualand coast comes under the influence of the cold, nutrient-rich waters of the Benguela Current, resulting in certain of the limpets achieving a markedly larger size than elsewhere. A bulk sample from square D9 (a column of 100 x 20 cm was removed for this purpose) was analysed for species composition. Table 8 indicates that *Patella granularis* and *P. granatina* dominate the upper part of the sequence while *Choromytilus meridionalis* assumes some importance in the lower units. Other limpet species (*P. argenvillei* and *P. barbara*) as well as the ribbed mussel (*Aulacomya ater*) never achieve 10% of the total in any unit. Branch (pers. comm.) has commented on the low number of *P. argenvillei*, which is both common along this stretch of coastline and provides plently of meat. It is, however, it situated in the Cochlear zone and would only have been exploited during low spring tides. Small numbers of whelks, *Oxystele variegata*, *Bullia* sp., *Crepidula porcellana* and barnacles are also present but are likely to have been introduced while attached to the selected molluscs. *P. granatina* occurs in the mid-tidal zone while *P. granularis* commonly is found from below high-water spring-tide to below low-water neap-tide levels. It is evident from the species composition that the inhabitants of the site were exploiting the Balanoid zone.

MNI values may be misleading, however, and the relative mass of fragments of each species also needs to be considered (Table 9). For example, in Twiggy the MNI values

Table 7. Spoeg River: Crayfish numbers and sizes.

	MNI (RIGHT MANDIBLES)	% OF TOTAL	MEAN WIDTH MM	MEAN CARAPACE SIZE
SUR	4	1,1	13,2 mm	90 mm
UN1	68	19,0	13,3 mm	90 mm
TWIG	53	14,8	12,6 mm	80 mm
BS	45	12,6	12,3 mm	80 mm
COP	7	1,9	10,7 mm	70 mm
PAT	59	16,5	12,3 mm	80 mm
AS	35	9,8	12,4 mm	80 mm
SBRN	48	13,4	10,7 mm	70 mm
ASBN	9	2,5	11,4 mm	75 mm
BRN	12	3,3	13,6 mm	95 mm
SHP	12	3,3	14,4 mm	100 mm
FBS	5	1,4	9,5 mm	75 mm
Total	357			

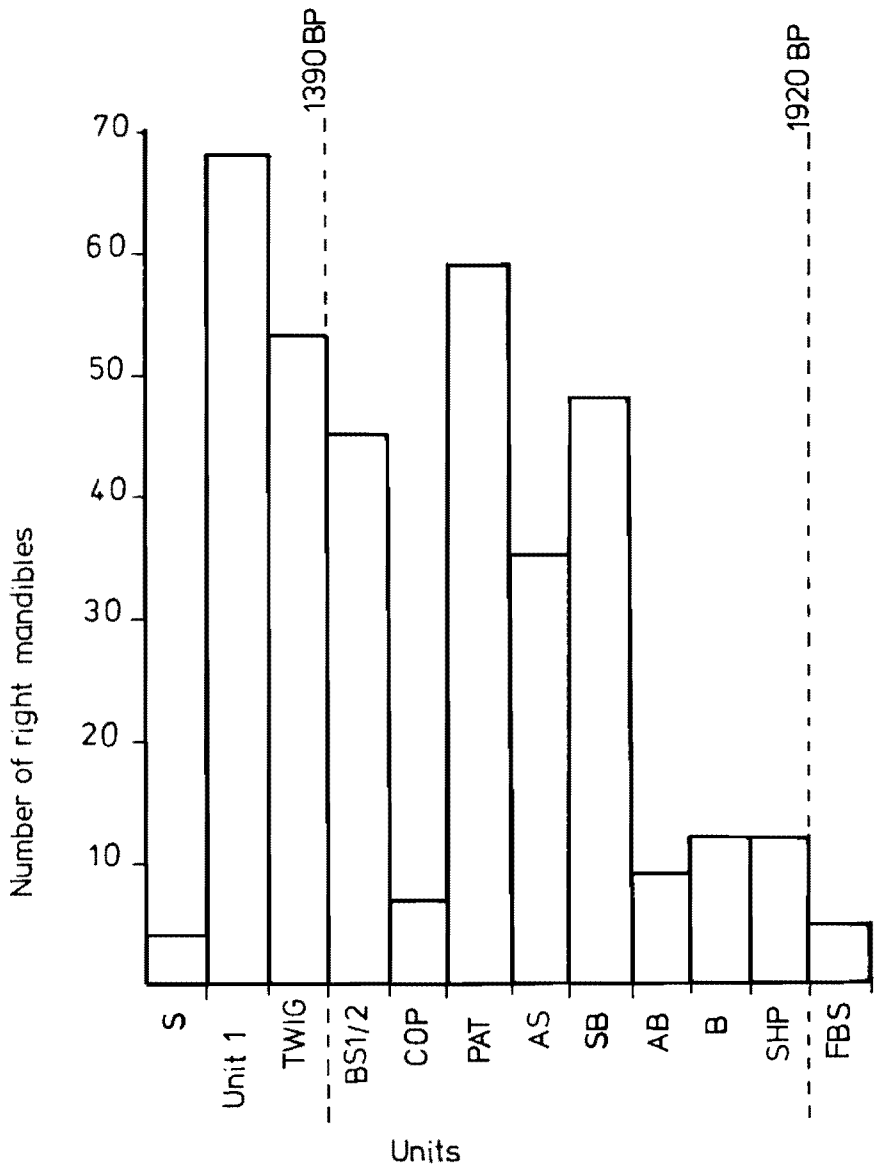

Fig. 10. Spoeg River: the distribution of crayfish mandibles by stratigraphic unit.

Table 8. Spoeg River: Shellfish MNIs and percentages.

	SUR	UN1	TWIG	BS1+2	PAT	AS	SB	AB	BRN	SHP	FBS
Choromytilus meridionalis.	-	3	14	11	28	4	-	4	13	103	9
Aulacomya sp.	1	-	1	-	-	-	-	-	-	2	-
P.granularis	3	133	72	185	208	247	87	17	16	192	35
P.granatina	26	83	197	175	112	150	98	36	2	72	14
P.argenvillei	-	6	9	23	7	2	3	-	-	7	2
P.barbara	-	1	-	2	1	-	1	1	-	-	-
Whelks	-	2	1	2	-	-	-	-	-	37	22
Oxystele sp.	-	-	-	-	-	-	1	-	-	-	-
Bullia sp.	1	-	-	-	-	-	-	-	-	-	-
Mussels MNI	-	3	14	11	28	4	-	4	13	103	9
Limpets MNI	29	223	278	385	328	399	189	53	18	371	51
Total	29	226	292	396	356	403	189	57	31	474	60
% mussels	0	1,33	4,79	2,77	7,86	0,99	0	7,02	41,94	21,72	15
% limpets	100	98,67	95,21	97,20	92,13	99,01	100	92,98	58,06	78,27	85
P.granularis	3	133	72	185	208	247	87	17	16	292	35
P.granatina	26	83	197	175	112	150	98	36	2	72	14
P.argenvillei	-	6	9	23	7	2	3	-	-	7	2
P.barbara	-	1	-	2	1	0	1	-	-	-	-
Total	29	223	278	385	328	399	189	53	18	351	51
% *P.granularis*	10,34	59,64	25,90	48,05	63,41	61,90	46,03	32,08	88,89	78,70	68,63
% *P.granatina*	89,66	37,22	70,86	45,45	34,14	37,59	51,85	67,92	11,11	19,40	27,45
% *P.argenvillei*	0	2,69	3,24	5,97	2,13	0,50	1,59	0	0	1,88	3,92
% *P.barbara*	0	0,45	0	0,51	0,30	0	0,53	0	0	0	0

for mussels are 4,79% and for limpets 95,21% (Fig.11). The percentage of mass fragments suggests that 34,03% are mussel and 65,56% limpet. This slight peak in mussel numbers in Twiggy is best illustrated in Figure 11.

Limpets comprise more than 90% of shellfish composition in units BS, Patella, Ashy Soil and Shelly Brown. Mussels, however, vary in frequency between 40% and 55% in the lower three units (Table 9). High mussel frequencies coincide with low crayfish numbers. An increase in crayfish numbers (in Shelly Brown) coincides with the shift from mussel/limpet exploitation to an almost complete reliance on limpets. It is clear that at around 1920±40 BP people were exploiting considerable numbers of mussels but that soon thereafter they switched to limpets. During FBS, SHP and Brown the inhabitants of Spoeg River exploited mussels and limpets in almost equal quantities but during Shelly Brown they not only concentrated only on limpets but also changed their species of limpets. Branch (pers. comm.) suggests that the over-exploitation of the black mussel may have precipitated this change. Another explanation is that there was a change in the season of occupation of the site. This issue is considered in chapter 6.

In terms of mass, units Twiggy, BS and Patella as well as Shelly Patch are richest in shellfish. Total shellfish fragments in Brown (which exhibits this peak in mussel) are the lowest of all the units and would seem to imply that shellfish may not have contributed significantly to the diet during this period (Fig. 12). The relative percentages of MNI of limpet species clearly demonstrates the importance of both *P. granularis* and *P. granatina* although Figure 13 shows interesting fluctuations through the sequence. *P. granularis*, which is easier to harvest than *P. granatina*, was selected for in units Brown, Shelly Patch and FBS.

Faunal remains: a small faunal sample was analysed by R.G. Klein (Table 10). The sample is dominated by the Cape fur seal, *Arctocephalus pusillus*. The west coast of Namaqualand is known for its large seal populations and there are several references to their exploitation in the historical records (e.g., Alexander 1838:85). While the inhabitants of the site may have been actively hunting seals, it is equally possible that they merely collected stranded seals from the beach. This possibility could be investigated by determining the age structure of a larger sample. Klein (pers. comm.)

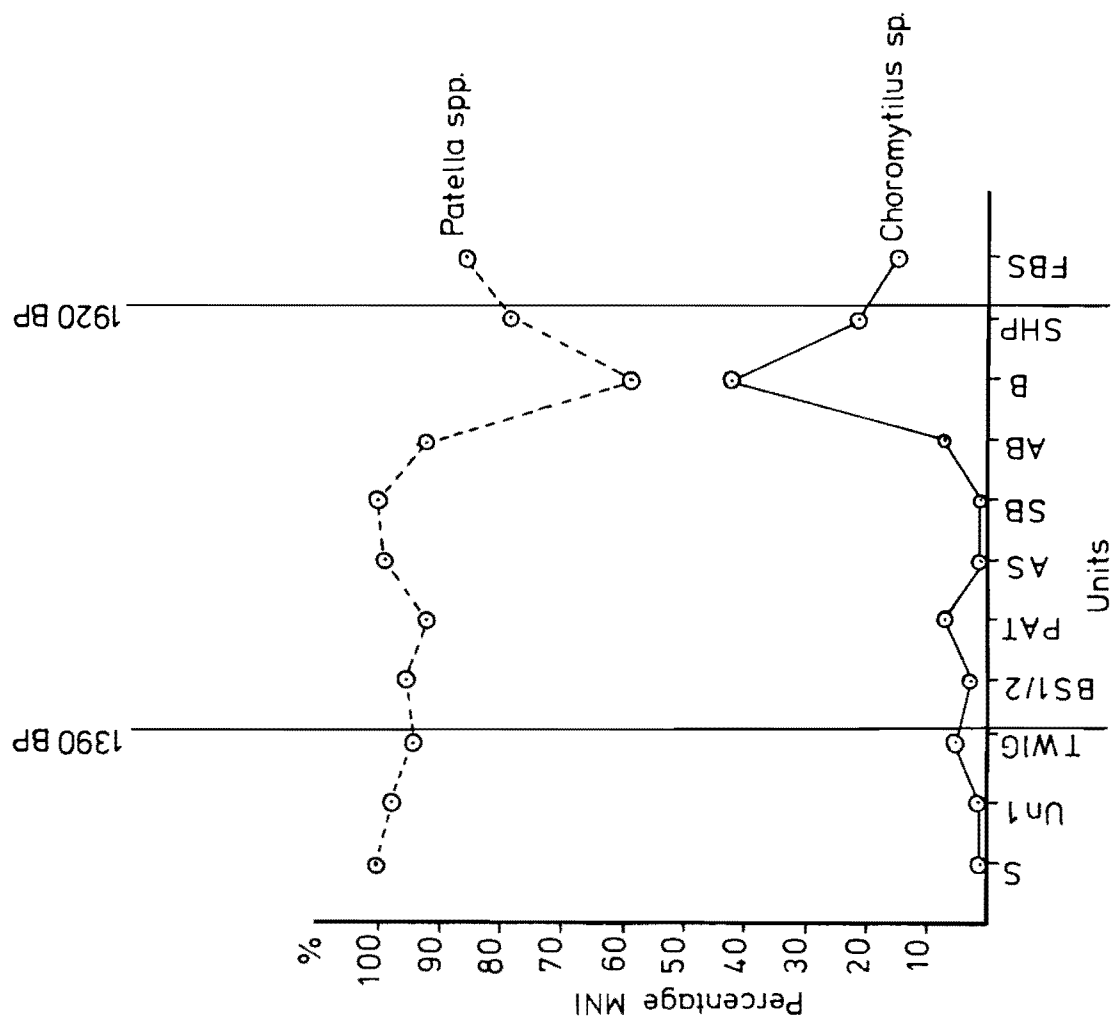

Fig. 11. Percentage mussels versus limpets at Spoeg River Cave.

Table 9. Spoeg River: Weight of shell fragments in grammes and percentage mass of species.

	SUR	UN1	TWIG	BS1&2	PAT	AS	SB	AB	BRN	SHP	FBS
Patella spp (grammes)	364,8	1176,3	1708	1798,8	1853,6	817,6	350,5	633,9	97,3	801,3	354,6
Choromytilus m. (grammes)	1	92,4	886,6	83,2	176,6	30,9	7,8	117,6	73	1114,3	295,5
Aulacomya a. (grammes)	0	0	0	0	0	0	0	0	0	0	0
Whelks (grammes)	0,5	6,7	8,9	5,6	19,1	0	1,2	10,1	6,2	82,7	33,2
Crepidula p. (grammes)	0	0,5	0	0,1	0,4	0,4	0	0	0,2	0	0
Barnacle (grammes)	0	0	1,7	1,2	2,1	0	10,9	1	1,9	1,2	2,2
Total	366,3	1275,9	2605,2	1888,9	2051,8	848,9	370,4	726,6	178,6	1999,5	685,5
% *Patella* fragments	99,59	92,19	65,56	95,23	90,34	96,31	94,63	83,12	54,48	40,07	51,73
% *Choromytilus* fragments	0,27	7,24	34,03	4,40	8,60	3,64	2,11	15,42	40,87	55,72	43,11
% *Aulacomya* fragments	0	0	0	0	0	0	0	0	0	0	0
% Whelks fragments	0,14	0,53	0,34	0,29	0,93	0	0,32	1,32	3,47	4,13	4,84
% *Crepidula* fragments	0	0,04	0	0	0,01	0,05	0	0	0,11	0	0,0
% Barnacle fragments	0	0	0,07	0,06	0,10	0	2,94	0,13	1,06	0,06	0,32

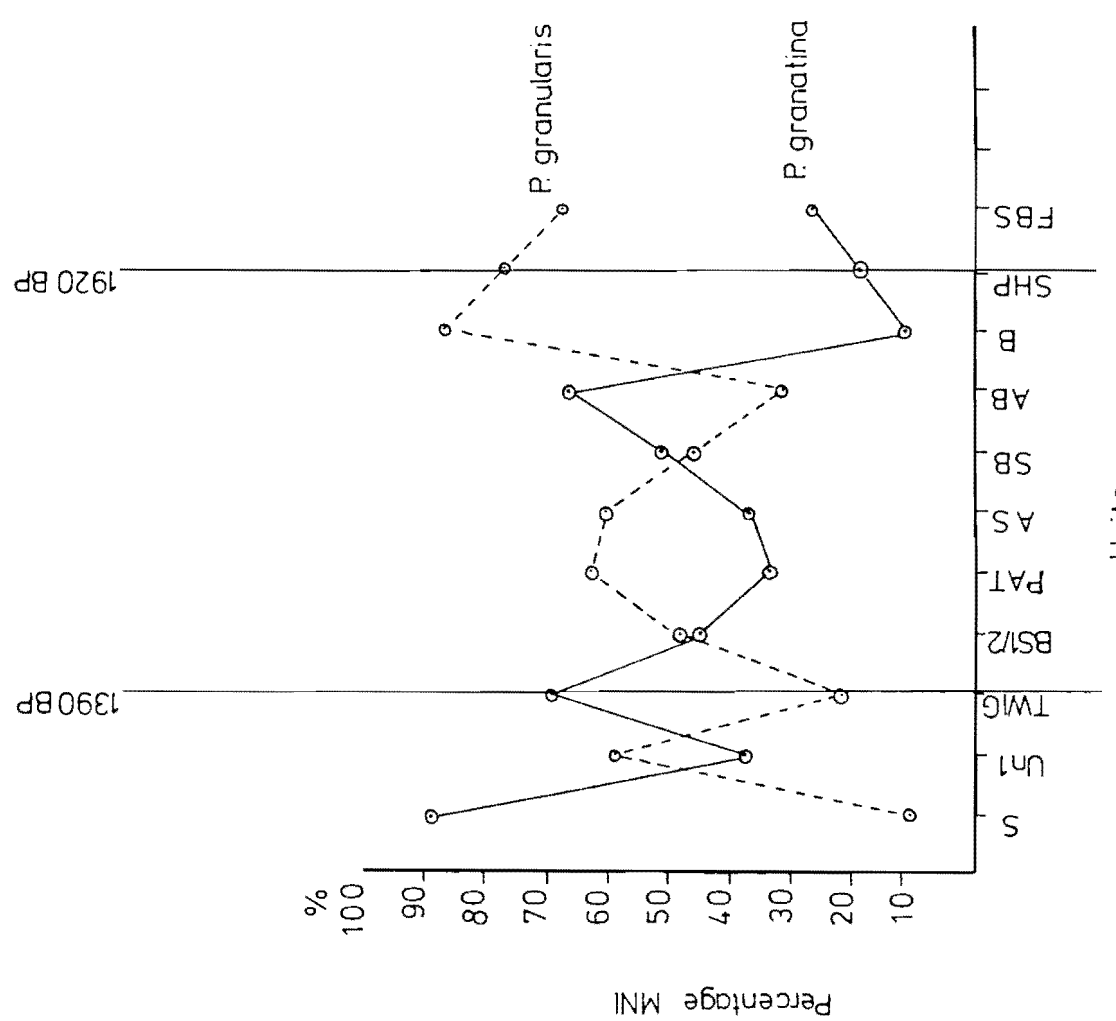

Fig. 12. Percentage *P. granularis* versus *P. granatina* at Spoeg River Cave.

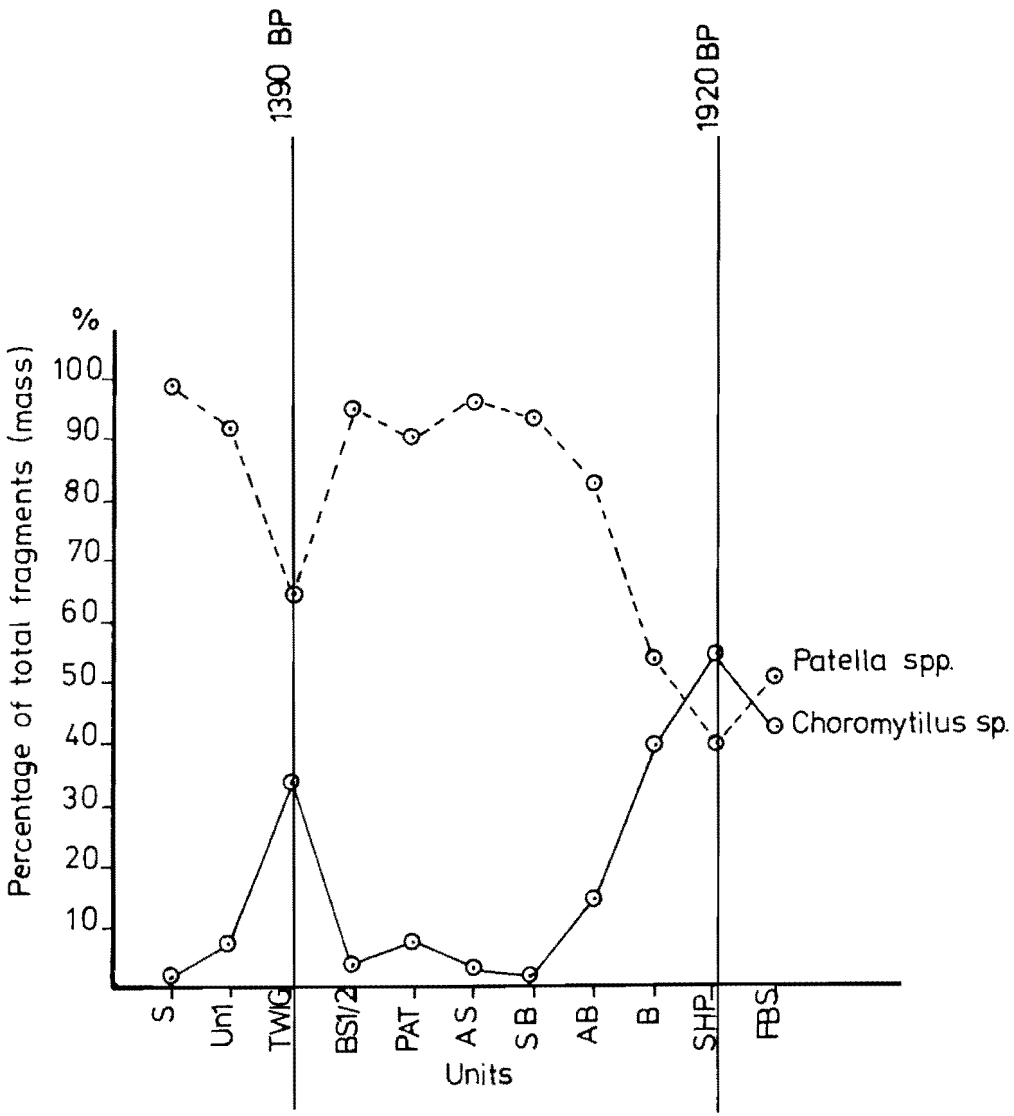

Fig. 13. Percentage mass of mussels, limpets and whelks at Spoeg River Cave.

Table 10. Spoeg River: Faunal list of NISPs and MNIs

	SURF	UN1	TWIG	BS1	BS2	COPR	PAT	AS	SBRN	GRA	ASBN	BRN	GRA2	SHP	SHP2	FBS
Lepus sp(p.)	2/1	5/1	3/1	5/1	2/1	29/2	17/2	10/2	17/2	6/2	0/0	0/0	1/1	0/0	0/0	1/1
Bathyergus suillus	0/0	1/1	0/0	0/0	9/2	11/2	15/2	20/2	5/1	0/0	0/0	0/0	0/0	1/1	1/1	1/1
Canis sp	0/0	0/0	2/1	1/1	8/2	2/1	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	1/1	1/1
Mellivora capensis	1/1	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
Galerella pulverulenta	0/0	0/0	0/0	1/1	0/0	0/0	1/1	0/0	1/1	0/0	0/0	0/0	0/0	0/0	0/0	0/0
Hyaena brunnea	0/0	0/0	2/1	0/0	1/1	0/0	0/0	0/0	0/0	0/0	0/0	1/1	0/0	0/0	0/0	0/0
Felis libyca	0/0	2/1	1/1	0/0	0/0	0/0	2/1	5/2	1/1	0/0	0/0	0/0	0/0	0/0	0/0	3/1
Felis caracal	0/0	1/1	0/0	1/1	0/0	0/0	0/0	0/0	1/1	0/0	0/0	0/0	0/0	0/0	0/0	0/0
Panthera leo	0/0	0/0	1/1	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
Panthera pardus	0/0	0/0	0/0	0/0	0/0	0/0	1/1	0/0	0/0	0/0	0/0	0/0	1/1	0/0	0/0	0/0
Arctocephalus pusillus	17/2	132/3	118/2	29/2	7/1	87/3	81/3	40/1	111/5	34/2	40/2	81/2	40/1	1/1	3/1	46/2
Procavia capensis	3/1	11/3	11/2	5/2	2/1	13/3	8/2	7/2	23/4	6/2	2/2	2/1	1/1	1/1	0/0	2/1
Alcelaphus buselaphus	0/0	0/0	0/0	0/0	0/0	1/1	1/1	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
Sylvicapra grimmia	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	1/1	0/0	0/0
Raphicerus campestris	0/0	1/1	0/0	0/0	1/1	0/0	2/2	0/0	2/1	0/0	0/0	0/0	0/0	0/0	0/0	0/0
Raphicerus melanotis	0/0	0/0	0/0	1/1	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
Raphicerus sp(p.)	0/0	9/4	3/1	3/1	5/2	5/2	35/5	6/2	19/4	0/0	0/0	0/0	0/0	1/1	0/0	1/10
Ovis aries (teeth only)	0/0	1/1	0/0	1/1	2/1	0/0	8/2	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
Ovis aries (teeth and bones)	3/1	2/1	0/0	4/1	5/1	10/2	22/2	1/1	0/0	5/1	0/0	1/1	0/0	1/1	0/0	1/1
Bovidae indet.																
small	5/1	42/4	47/2	28/1	10/2	61/7	106/5	42/2	57/4	9/1	11/2	7/2	4/1	19/2	10/1	21/2
small-medium	4/1	2/1	0/0	7/1	5/1	14/2	29/2	2/1	6/1	0/0	0/0	2/1	0/0	3/1	0/0	3/1
large-medium	0/0	0/0	0/0	0/0	1/1	18/2	10/1	1/1	4/1	3/1	0/0	1/1	0/0	0/0	0/0	0/0
large	0/0	0/0	2/1	1/1	0/0	1/1	0/0	2/1	1/1	0/0	0/0	0/0	2/1	0/0	0/0	3/1
Chersine angulata	XX/2	XX/3	XX	XX/1	XX/1	XX/1	XX/4	XX/4	XX/12	XX/2	XX	XX/2	XX	XX/1	XX/1	XX/2

commented on the skeletal part frequency of the seals in the sample that the significantly large numbers of carpals, tarsals, metapodials and phalanges are unlike any other sample he has seen. Discussing the contribution of carnivores (more specifically the brown hyaena) to the bone accumulation, Klein adds, however, that he doubts whether the abundance of carpals and tarsals could reflect hyaena activity since these are the bones one would expect them to swallow and destroy most readily. These bones are not as common at Kasteelberg (Klein & Cruz-Uribe 1989) because they are likely to have been consumed by dogs.

Nevertheless, Klein (pers. comm.) does confirm that agents other than man (the latter indicated by burnt bones and cut marks) also contributed to the faunal accumulation. The presence of carnivores is indicated by the relatively large number of bones attacked by digestive juices and Klein suggests that the carnivores are likely to have been the brown hyaena or strandwolf (*Hyaena brunnea*) which is known to scavenge along the coast. The corroded bones were most common in the Coprolite unit and the dense accumulation of coprolites (identified as belonging to the brown hyaena) and sticks are further confirmation that the cave did function as a lair for some period between 1300 and 1900 BP. A variety of other carnivores (generally represented by only a single bone each) are also present (Table 10). Regarding gnaw marks, Klein observes that there is virtually no chewing of the kind that is common on the Kasteelberg bones attributable to dogs and he therefore believes that the jackal/dog contribution to the Spoeg River fauna was probably minimal.

Cape fur seal NISPs show several peaks through the sequence, most notably in Brown, Shelly Brown, Patella, Coprolite, Twiggy and Unit 1. Both dassie and hare appear to have contributed to the diet in equal numbers. High numbers of dassie, hare and dune molerat occur in Shelly Brown. This, together with the evidence of Cape fur seal, suggests a period of intensive occupation. Hare numbers are very high in Coprolite which may mean that they formed part of the diet of the brown hyaena.

Tortoise numbers are not very high but, according to Klein, sizes are unusually small. The mean breadth of the distal humerus is only 5,39 mm which is the smallest he has ever seen. He suggests that most of these tortoises could have been introduced by crows

or some other predatory bird. Birds do roost in the cave and a rich microfauna layer under the coprolite layer does confirm that birds could have been a contributory factor to the faunal accumulation. Tortoise numbers also show a slight peak in Shelly Brown, coinciding with the evidence from the dassie, hare, dune molerat and cape fur seal.

The bovid postcranial remains were in general too fragmentary to identify to species level and Klein has assigned most to one of four size categories. Species counts are based only on teeth. Hartebeest, grey duiker, steenbok and grysbok could be positively identified. The *Raphicerus* spp. (grysbok/steenbok) graph has a small peak at Shelly Brown but the largest number of identifiable specimens is found in Patella. The small bovid category includes *Raphicerus* sp., small medium *Sylvicapra* sp. and *Ovis* sp., large medium includes *Alcelaphus* sp. and the large category *Taurotragus* sp. or *Bos* sp. The largest number of small and small medium sized bovids occurs in Patella (rather than Shelly Brown) and this peak in small herbivores co-incides with the sheep counts.

Klein was able to positively identify sheep. Numbers, based only on teeth, were very low and present only in Unit 1, BS and Patella. However, when probable post-cranial bones are also included in counts, sheep are observed to occur in almost every unit to bedrock. Although only one identifiable fragment occurs in FBS, SHP and BRN, numbers of identifiable specimens increase to five in Grass and peak in Patella with 22 fragments. Sheep does not occur, however, in Shelly Brown. Numbers may appear low when compared, for example, with sites such as Kasteelberg; however, it should be borne in mind that only two square metres were sampled. The majority of sheep faunal fragments predate 1390$\pm$50 BP and at least two fragments date to 1920$\pm$40 BP and earlier. This lower date is especially significant and clearly needs to be verified by accelerator dating the bones themselves.

The bovid skeletal part representation looks normal to Klein; and it is only the representation of seal skeletal parts that is unusual. All the faunal remains were examined for cut marks; there are nine phalanges with clear cut marks, three ribs, a carpal/tarsal and five other small fragments.

Discussion on Spoeg River

I have divided the occupation of the site into three phases on the basis of a number of criteria discussed below and in the following chapter. Units FBS, Shelly Patch and Brown appear to form a phase of occupation distinct from the units above them. Sheep and pottery are present but in very small numbers during the initial stages of occupation of the site which date to 1920±40 BP. Stone artefacts are present in greater numbers than in the upper units, formal tools are more frequent and there is a relatively greater number of artefacts made on silcrete and chalcedony. The only segments recovered from the excavation occur in these lower units. Bone tools are absent from the lowest units, but make their first appearance in Ashly Brown, immediately above Brown. There is no evidence, however, for two distinct stone tool traditions with a clear break at unit Brown. There is a gradual reduction in silcrete and chalcedony artefacts up to Patella. The only two scrapers from the upper units are not as wide as those in the basal units. I would propose that the greater stone artefact density in these basal units represents relatively longer occupation of the site. This is borne out by the unfinished bead numbers. Brown, with ten unfinished beads, appears to differ substantially from the upper units. The occupants of the site subsisted on large numbers of black mussel and *P. granularis*, both of which are relatively easy to harvest. Crayfish were not collected in any substantial numbers. There is very little evidence for the faunal contribution to the diet. Only Cape fur seal and small bovids occur in any number. The exploitation of large numbers of mussels suggest that the site was possibly occupied in winter when there was no red tide. The only plant remains from this period are from GRASS 2 (combined with Shelly Patch for the purposes of this analysis) and seem to consist entirely of grasses.

Units Ashly Brown, Shelly Brown, Ashy Soil and Patella are grouped together to form the second phase of occupation of the site. Brown differs from Ashly Brown in the fairly sudden elimination of mussels from the diet and the increasing exploitation of *P. granatina* at the expense of *P. granularis*. Crayfish numbers are still low in Ashly Brown but increase markedly in Shelly Brown. Other noticeable increases in faunal counts include tortoise, hare, dunemole rat, dassie, Cape fur Seal, *Raphicerus* spp. and small bovids. Only sheep are absent in Shelly Brown but appear in numbers in Patella. Plant and plant food remains make their first significant appearance in this phase.

Euclea and *Rhus* seeds are being exploited as well as small numbers of corms from various bulbs. Sea bamboo appears to have been used and a variety of different thicknesses of cordage occur in this phase, suggesting that the occupants of the site were better integrated with their environment. In terms of the cultural component of the second phase of occupation, stone artefact numbers decrease quite substantially from Brown to Ashly Brown. There are also fewer formal tools and less silcrete and chalcedony artefacts. Bone artefacts make their first appearance, and potsherds show a small increase in Shelly Brown. Ostrich eggshell fragments are still low but beads peak in Shelly Brown and Ashy Soil while unfinished beads decrease in number, indicating that the site may have been visited for shorter periods. The final stage of this second phase, Patella, exhibits a quite remarkable increase in the exploitation of of various bovid sizes and most noticeably in sheep. Cape fur seal, dassie, dunemole rat and tortoise numbers are lower than in Shelly Brown. Crayfish numbers are also up and plant foods were being harvested on a large scale. There are very few beads and potsherds in this unit and stone artefact frequencies remain unchanged. This second phase of occupation dates to between 1390±50 BP and 1920±40 BP, a period of some 500 years represented by some eight stratigraphic units (i.e., some 60 years per level). The phase comes to an end with the Patella occupation, after which the site appears to have been abandoned for many years. Birds roosted on the ledges of the cave, resulting in a substantial accumulation of microfauna after which the cave became the lair of the brown hyaena.

The third and final phase of occupation dates to 1390±50 BP and later. The site was inhabited during the period named BS by people, I submit, not significantly different in material culture or economic preference from those of the second phase of occupation. Stone artefact frequencies remain low, as do formal tools, and silcrete and chalcedony artefacts are very few. The presence of specularite indicates that the inhabitants were now part of the larger exchange network in operation in the northern Cape. Potsherd numbers increase significantly, however, and for the first time sherds are decorated. Bone implements increase substantially and new elements such as a tortoise-shell bowl and a number of seed beads are present for the first time. The large number of ostrich eggshell fragments in Unit 1 coincides with peaks in potsherd numbers and in beads, suggesting that ostrich eggshells may have been valued as much

for containers as for raw material in the manufacture of beads. Plant remains occur in very large numbers in this top phase. There is evidence for bedding units and the storage of seeds in Twiggy. Matjiesgoed (*Scirpus* sp. reeds) and string occur, suggesting that people may have been living, at least for a part of the year, in structures made of mats. The evidence from the seeds and flowers from this top unit are further confirmation that the site was occupied during the spring and summer. Crayfish are once again exploited in large numbers and there is a brief swing in Twiggy to the harvesting of mussels on an almost equal scale to limpets. Tortoise, hare and dunemole rat do not assume their former importance and sheep also occur in very small numbers. The diet of this last phase of occupation reverts to Cape fur seal, dassie, *Raphicerus* spp. and small bovids. There are no marked changes during the period of approximately 600 years represented at the site. The three phases of occupation are identified on small-scale developments in material culture and dietary remains.

On the basis of the microfaunal evidence it would appear, suggests Avery (in press), that "people moved into the area at a time when conditions were relatively benign and left again as drought conditions returned. The decline in grass could have made it even more necessary for people with sheep to move on to a more suitable region".

Observations on the archaeology of the Namaqualand Coastal Zone.

Two very small shell scatters on the bluff near the site of Spoeg River, each no more than 8 metres in diameter and containing stone artefacts and potsherds, appear to be single occupation accumulations possibly co-terminous with that of the cave. Further south, approximately 5 km from the site, a fresh spring bubbles up from the beach and runs into the sea. The eye of the spring is surrounded by a dense stand of reeds and attracts many birds. A very large limpet midden containing quartz flakes, potsherds and ostrich eggshell fragments extends inland from the spring. The spring is apparently the only permanent source of fresh water for kilometres along the coast and we may speculate that it would have formed a focus for occupation when the water in the lagoon became too saline.

Almost the entire coastal zone is now controlled by various mining institutions and for this reason very little is known of the archaeology of this region. Observations in the literature relating to the occupation of the Namaqualand coastal zone date to the last century. Martin (1872) noted in 1858 that Namaqua Bushmen still "live from such shell-fish as they can procure from the sea-shore and carry them to their dens, caves, or bush, as the case may be", adding that one frequently encountered large flat grooved stones and perforated stone hammers (bored stones?) at these sites. Colson (1905) observed of the "kitchen middens" of Port Nolloth that they were dominated by limpets. These middens, he reported, were situated about thirty feet (10m) above the beach level and contained 'large quantities' of small carnivorous and herbivorous bones as well as ostrich eggshell pieces. The stone artefacts consisted of "scrapers and sharp flakes" which he remarked were of chert "and are of a very rude character". Grinding stones and querns were reportedly common. Ostrich eggshell beads, some it would appear in various stages of manufacture, had diameters ranging in size from one-eighth to one-quarter inch in size (i.e., about 3 - 6 mm).

There were "large quantities of potsherds, the greater portion of a small pot, and an almost complete pot about 9 inches in height conical in shape" (Colson 1905:167). The large pot he found buried in "an upright position at surface level on a midden". He claimed that it was about half full of *magnetic iron sand* used for tempering clay but Rudner (1968) is of the opinion that it was probably specularite, which is frequently founded in caches in Namibia. Colson also described groups of stone, fifteen in all, which he observed to be a characteristic of the coast. He excavated six of these but they were not associated with any cultural material and it was not possible to infer their function. A number of complete pots as well as diagnostic potsherds have been recovered during the last thirty years from the Namaqualand coast at Alexander Bay, Port Nolloth and Kleinsee (Rudner 1968). These pots are discussed in greater detail in chapter 7.

More recently, an awareness of the extensive destruction caused by opencast mining has prompted institutions to consult archaeologists before initiating new projects. The contracts office at the Department of Archaeology, University of Cape Town, has undertaken a preliminary survey of the area around Brand se Baai, which is some 350

km north of Cape Town and on the southern extremity of the Namaqualand region (Fig.2). They have located 100 archaeological sites (Parkington pers. comm.), a number of which are situated within 10 or 20 metres of the intertidal beach. They were small (less than 20 metres in diameter) dominated by limpets (*Patella argenvillei*), and characterised by an informal quartz industry. Parkington suggests that these sites may have been low-tide 'snacking stations'.

Situated on top of the red aeolian dune bluff is a second set of sites. They are larger (up to 250 metres across) and contain both *P. granatina* and *P. granularis*. They also contain more information regarding human habitation, i.e., ash features and hearths. These sites are also richer in potsherds, beads, grindstones and animal bones. Parkington is of the opinion that these larger sites represent more permanent, domestic campsites but that both sites 'fit into a single episode of land use'. He suggests a recent date of no more than 1000 years. Although no absolute dates have been obtained for these sites, he is of the opinion that settlement along this stretch of the coast appears to have been episodic and possibly restricted to periods of favourable climate. Radiocarbon dates from some of these sites are at present being undertaken.

A second survey, for another institution, was undertaken at nine different locations along the Namaqualand coast. All of these locations were found to have shell middens on them. Parkington estimates that they probably date to the late Holocene although more recent surveys suggest that mid-Holocene sites may also be present (Smith pers. comm.). Although a good deal of variability was observed, in general it may be said that they are limpet-dominated; and some contain substantial numbers of ceramics, ostrich eggshell fragments, grindstones and chipped stone artefacts. The location of sites on the dune cordons and dune bluffs, which are late Holocene aeolian deposits , means that they all post-date 3000 BP. Although very few coastal areas have been surveyed, it would appear that there are an extraordinarily large number of sites, in view of the almost complete absence of surface water, especially during the summer months.

THE INTERIOR SANDVELD

The Sandveld consists of a relatively undulating plain covered in Succulent Karoo vegetation and extends to the rocky outcrops which form the foothills of the Kamiesberg

Mountains. The southern area between the Groen and Olifants Rivers is known locally as the Knersvlakte. It is a barren plain without any water in summer except for a spring at Meerhoffs Kasteel which functioned as an important stop-over for early travellers en route to the north. The Knersvlakte could conceivably have been a major obstacle to herder movements during later summer; i.e., February/March (De Kock 1983).

ARCHAEOLOGICAL EXCAVATIONS IN THE SANDVELD

Bethelsklip

Bethelsklip (Fig.2) was excavated between 1981 and 1983 and is described at length (Webley 1984). Two dates were obtained from the site, namely, 800±50 BP (Pta-3512) at 59 cm below the surface in BLL2 and 360±40 BP (Pta-4741) at 10 cm below the surface in BL. Both samples were selected from the 1981 excavations (Fig. 14) and although an attempt was made later to combine the excavated data with those of the 1983 excavations, I believe greater accuracy will be achieved by presenting the data from each investigation separately. Faunal material was combined during analysis and is therefore presented in a single table (Table 11).

There are a number of stratigraphic units below the date of 800±50 BP but the date coincides with the unit of greatest lithic concentration. In both the 1981 and 1983 excavations formal tools amounted to only 0,7% of the total lithics (Tables 12 & 13). This is even less than Spoeg River. The largest number of formal tools is concentrated below the peak in artefact frequency, a similar phenomenon being observed at /Ai tomas. Quartz artefacts consistently amount to over 90% of artefact totals. With respect to scraper shapes, there is a tendency for scrapers in the lower units (800±50 BP) to be wide (the width/length ratio fluctuates around 130) while scrapers in the upper units tend to become more circular (Webley 1984, table 12).

Potsherd frequencies are greatest in the upper units, above those of the artefact concentrations, although potsherds are present to the base of the excavation. Decorated potsherds (Figs. 15, 16 & 17), marine shell and bone artefacts are concentrated in the layers between 800±50 BP and 360±40 BP. This is also the case with ostrich eggshell

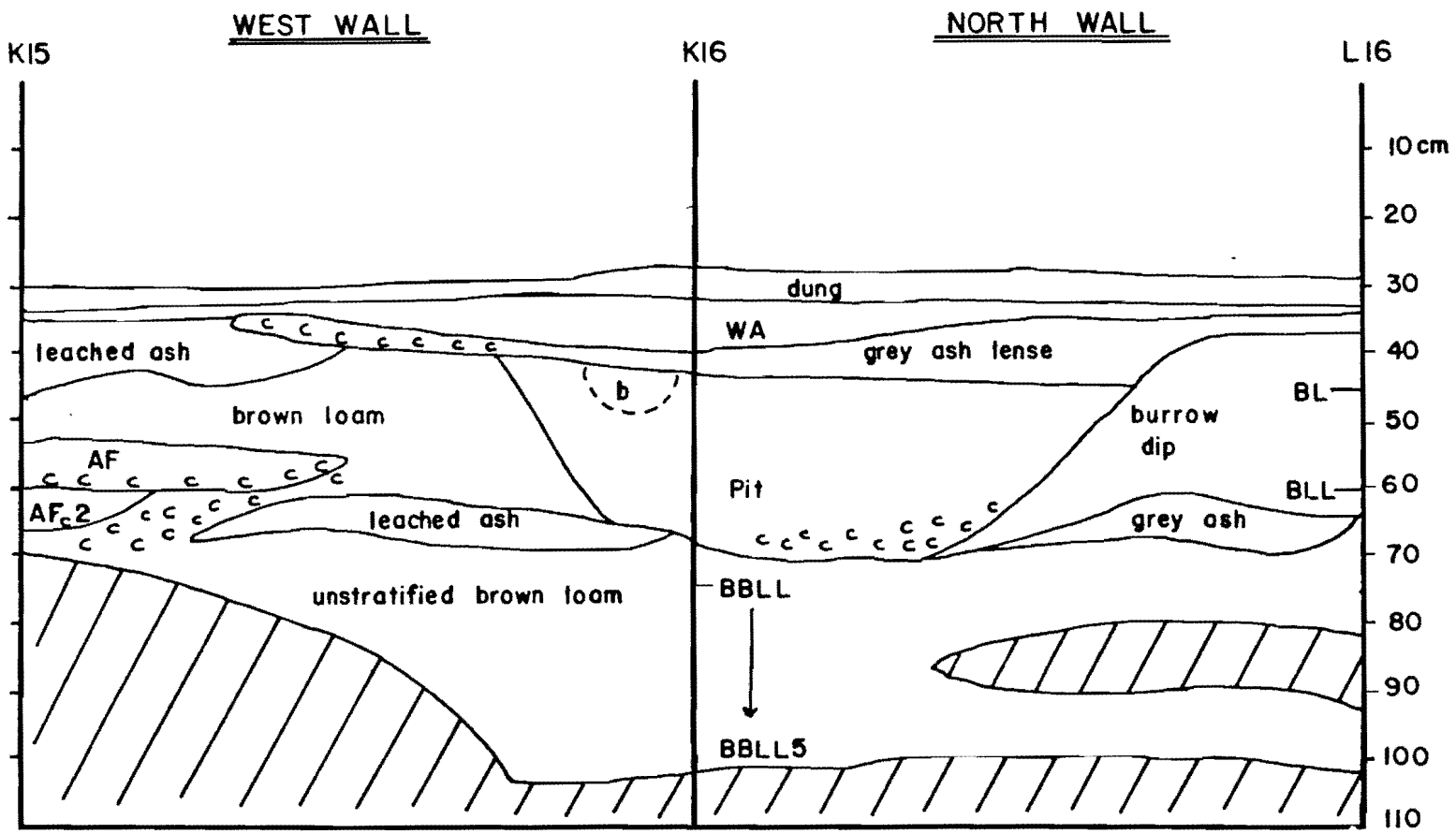

Fig. 14. The west and north sections of square K15 at Bethelsklip. The radiocarbon dates were obtained on samples from unit BL and BLL2 from square K14.

Table 11: Bethelsklip: 1981 and 1983 faunal assemblage.

	S	CS	CS2	BL	BL2	DGL
Ungulate Class 1	X	X	X	X	X	X
Ungulate Class 2	X	X	X	X	X	-
Ungulate Class 3	X	X	X	X	X	-
Ovis/Capra	1	1	1	2	2	-
cattle?	-	X	X	-	-	-
Raphicerus spp	-	2	2	-	-	-
Antidorcas spp	-	-	-	-	-	1
carnivore	X	-	X	-	-	-
Lepus/Pronolagus	-	1	1	1	1	-
Procavia capensis	2	3	13	7	5	2
Papio ursinus	-	-	-	1	-	-
Snake	-	X	X	X	X	X
Bathyergus javetta	-	2	-	-	-	-
Otomys spp	-	-	-	1	2	-
Lizard	-	X	-	-	-	-
Bird (Francolin size)	-	-	X	-	-	-
Bird (dove size)	-	X	X	X	-	-
Struthio capensis	-	X	-	-	-	-
Chersina angulata	X	1	16	11	1	X
Homopus signatus	-	-	-	-	-	1
Tortoise carapace (grammes)	53	764	3304	1626	781	45
Indet. bone (grammes)	355	601	682	616	773	-

Table 12. Bethelsklip: 1981 lithic artefact inventory.

	WA	BL	BLL2	BBLL2	BBLL4+
Buckets	18	145	78	17	12
Chips	7	764	1801	182	216
Chunks	14	664	881	155	111
Cores	1	1	10	1	2
Flakes	74	2019	2790	454	303
Core red.pieces	-	33	43	9	13
Core rej.flake	-	-	1	-	-
P.esquillées	-	4	-	-	-
Waste total	96	3496	5526	801	645
Utilized flakes	5	105	146	29	19
Grindstone pieces	-	2	1	-	-
Utilized total	5	107	147	29	19
Scrapers	1	15	19	10	3
Segments	-	1	4	-	-
Backed pieces	-	2	6	2	1
MRP's	-	2	4	3	1
Formal total	1 = 0,9%	20 = 0,5%	33 = 0,6%	15 = 1,8%	4 = 0,7
Grand total	102	3623	5706	845	669

Table 13: Bethelsklip: 1983 lithic artefact inventory.

	S	CS	CS2	BL	BL2	DGL	
Buckets	176	150	144	130	48	2	
Chips	317	711	1171	1145	900	71	
Chunks	586	1483	2382	2403	1221	56	
Cores	8	15	12	9	6	3	
Flakes	565	1052	1412	1374	1033	52	
Core red.pieces	3	7	7	4	7	2	
P.esquillées	-	1	-	-	-	-	
Bladelets	1	5	4	7	17	-	
Waste total	1479	3274	4991	4942	3184	184	
Utilized flakes	29	56	36	34	13	4	
Grindstones	-	-	1	-	-	-	
Utilized total	29	56	37	34	13	4	
Scrapers	6	13	10	17	11	-	
Segments	1	2	1	5	-	-	
Double segments	-	2	2	2	-	-	
Backed pieces	4	14	10	5	1	2	
Adzes	-	-	-	1	1	-	
MRP's	4	2	10	3	2	-	
Formal total	15/1,0%	33/0,9%	33/0,6%	33/0,7%	15/0,5%	2	
Grand total	1524	3363	5058	5009	3212	190	

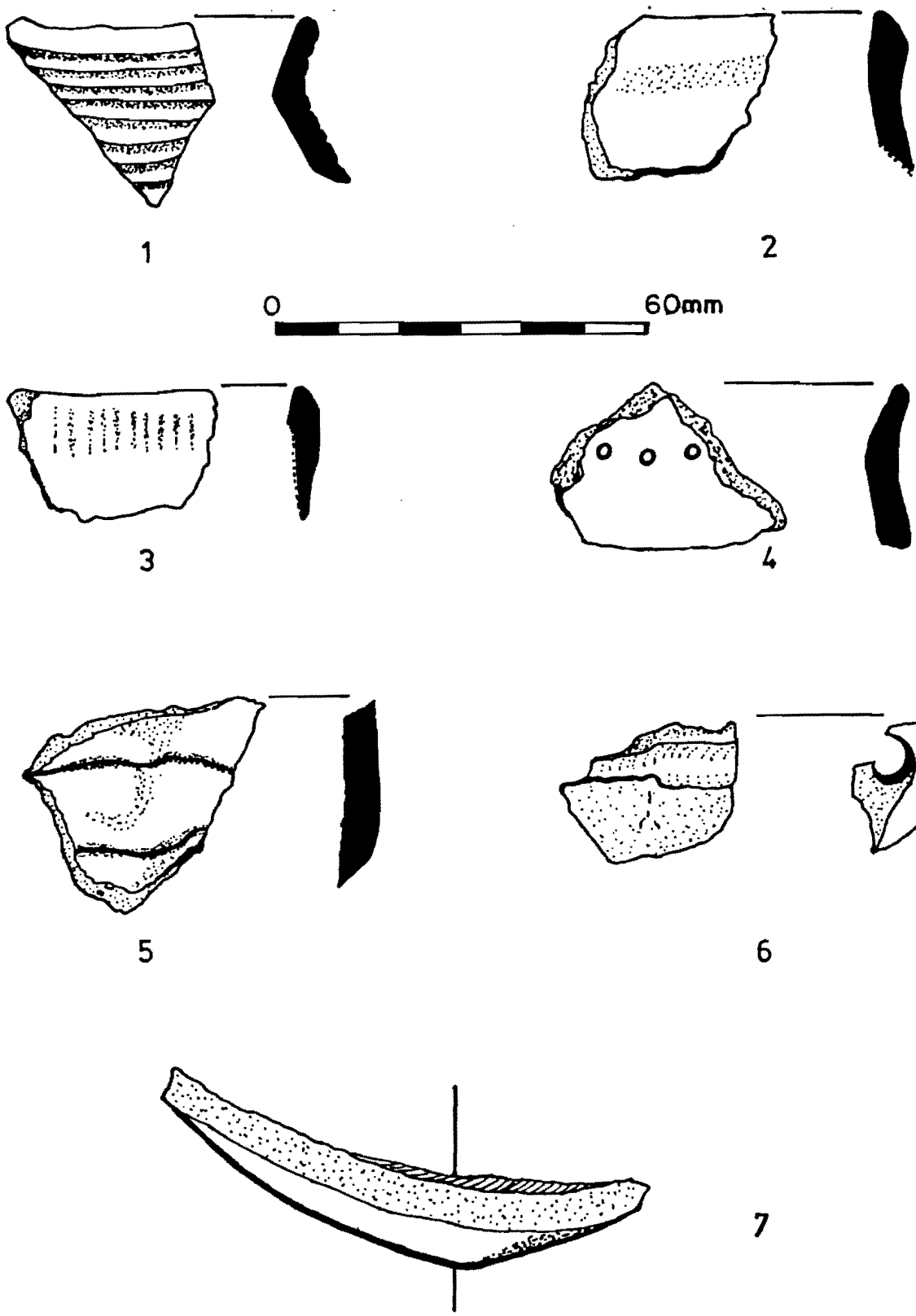

Fig. 15. Diagnostic pottery from Bethelsklip: 1 = WA; 2 = BLL; 3 = BLL; 4 = BL; 5 = BL; 6 = BLL2; 7 = BLL.

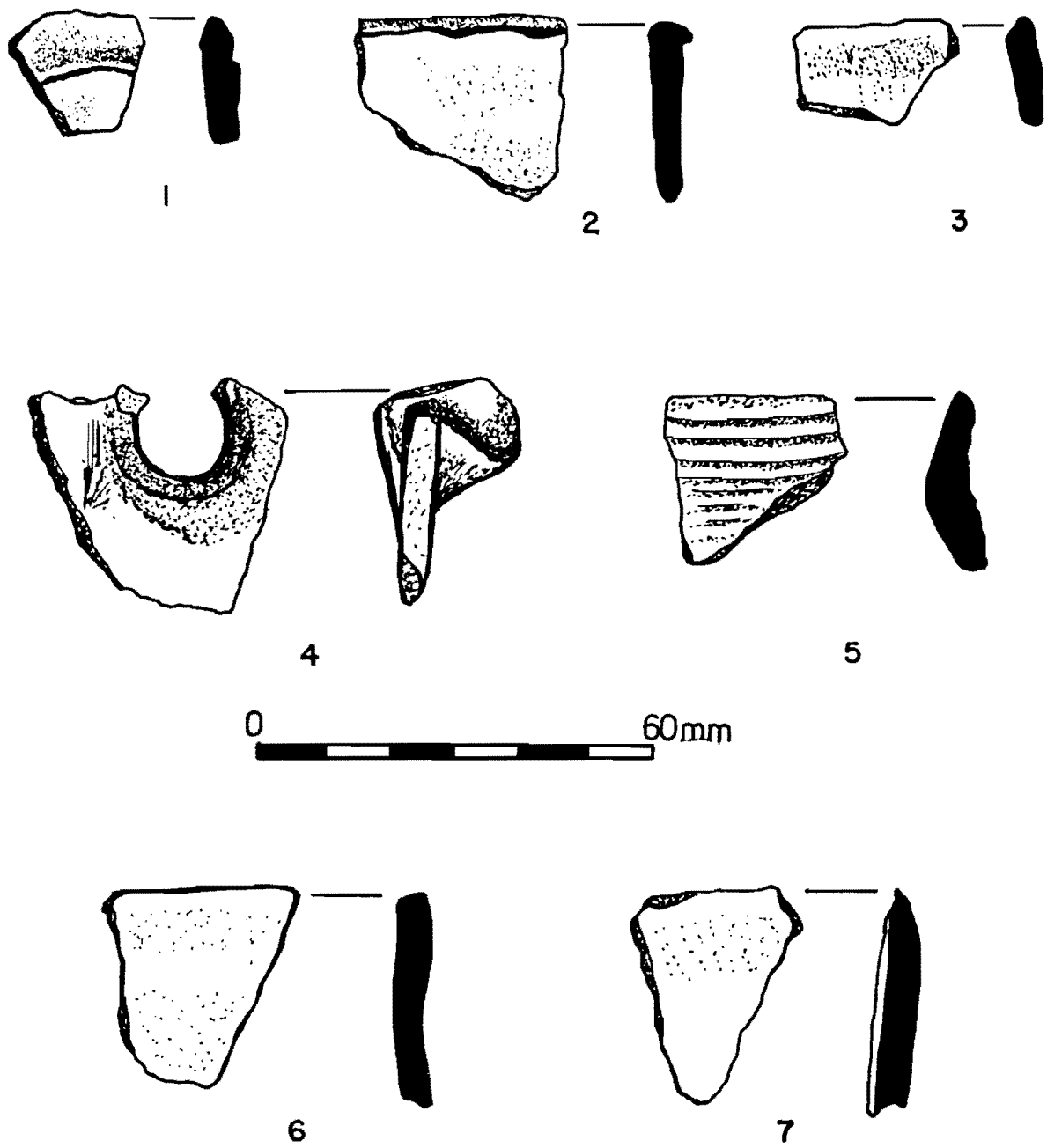

Fig. 16. Diagnostic pottery from Bethelsklip: 1 = GAL; 2 = CS2; 3 = CS2; 4 = GAL; 5 = CS; 6 = CS; 7 = GAL.

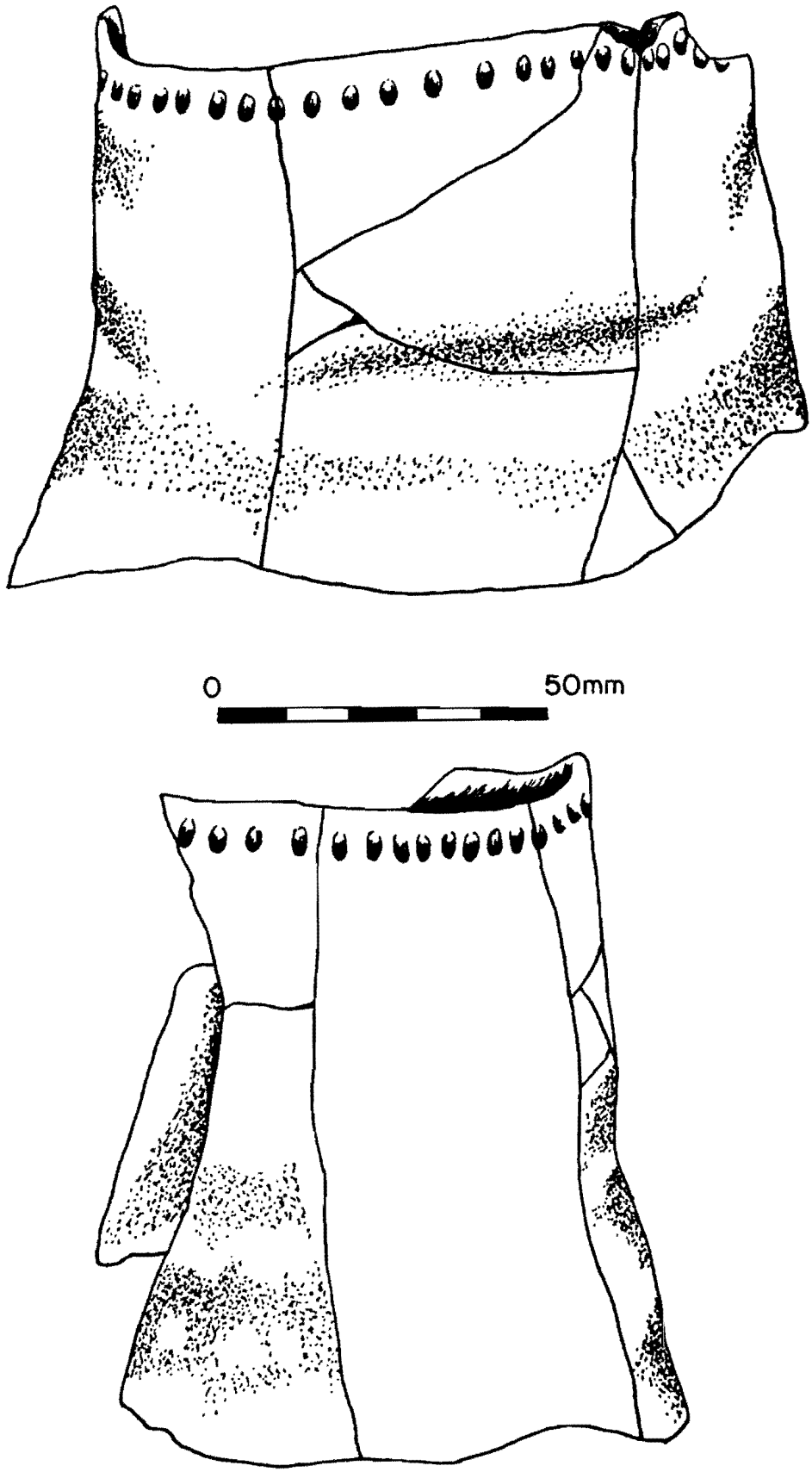

Fig. 17. Partially reconstructed pot from BL2.

beads although frequencies of OES fragments tend to peak slightly lower. A cursory measurement of the external diameter of OES beads of the 1981 sample revealed that beads of up to 8mm are present down to unit BLL. No beads greater than 7 mm were found beneath BLL.

A.von den Driesch positively identified goat in WA, BL and BLL, i.e., in those units dating between 800 and 360 BP (Table 11). The peak in lithic artefact numbers in BL2/BALS/LA would make it more or less contemporary with BLL2 (dated to 800±50 BP), thereby demonstrating that most of the 1983 sequence probably fits on top of the 1981 sample. The older deposits therefore occur within the dripline while the younger units are found outside. The upper units continue to be dominated by quartz artefacts (more than 90%) and have few formal tools. Potsherd numbers are high and are associated with ostrich eggshell beads and fragments, at least five trade beads, bone artefacts and marine shell pieces. It is especially interesting to note that *Choromytilus meridionalis* occurs in the lower units while numerous fragments of *Patella granatina* are found closer to the date of 360±40 BP.

The combined faunal graph confirms the presence of *Ovis/Capra* down to BL2. The small ungulate class (*Raphicerus* spp. and *Sylvicapra* sp.) occurs in all units. The medium ungulates (*Ovis/Capra* and at least one springbok) are found to BL2 while the large class (possibly including cattle as well as large antelope) is only found to BL. In the main, dassie and tortoise remains predominate, the former in large enough numbers to confirm the evidence of the plant food remains, namely that the season of occupation was almost certainly spring and early summer.

THE KAMIESBERG AND ITS FOOTHILLS

The dome-shaped granite hills of the lower mountain areas are covered in Namaqualand Broken Veld characterised by succulents, semi-succulents and herbs (Fig. 4). This vegetation type also contains a large number of natural grasses which is considered to have the highest carrying capacity in Namaqualand. The vegetation reaches its optimum growth period between June and November, when there is a high percentage of edible plants. There is a marked drop in carrying capacity during the summer months when

many of the plants have lost their leaves. Succulents are the only plants which can be eaten in summer. The veld is generally described as poor after January. The mountain zone in Namaqualand stretches from the Kamiesberg in the south, through the Koperberg to the Kuboes granites in the great bend of the Orange River. The mountains are not continuous and many passes and kloofs lead through them into the interior plateau. The highest peaks in the Kamiesberg reach a height of 1700 m and the high altitude has a mitigating effect on the summer temperatures, which are several degrees cooler than those in the surrounding plains. Winter temperatures, however, frequently drop below freezing and snow is not uncommon.

The Kamiesberg receives the highest rainfall in Namaqualand. Figures collected over a twenty-year period from the village of Leliefontein and over a seventeen-year period from the farm Eselsfontein, 10 km away, indicate that during this 37-year period the rainfall ranged between 620 mm in 1974 and 189 mm in 1924. The mean for this period is approximately 350 mm which is considered sufficient for the cultivation of wheat. It is quite common for the region to experience severe droughts which may be followed by periodic floods, resulting in extensive stock losses. The topography and high rainfall in the Kamiesberg results in a well-developed drainage system. The western side of the mountain is drained by a number of small rivers which cross the Sandveld from east to west before debouching into the Atlantic Ocean. The upper reaches of the Kamiesberg contain a number of permanent springs; some, like that at the settlement of Leliefontein, produce sufficient water for extensive market-gardening. Mountain Rhenosterveld (Acocks Veld Type 43), although situated on top of the Kamiesberg, contains a vegetation structure similar to that of the Fynbos Biome (Rutherford & Westfall 1986:37). Part of the reason for this may lie in the "granitic substratum giving rise to soils with a higher nutrient status than sandstone-derived soils [which may] be significant in favouring the evolution of adaptive (edaphic) endemics in the area" (Rourke 1990:265). Excessive grazing has resulted in a general opening of the ground cover and has modified the composition of the vegetation. The carrying capacity of the veld is very low and for this reason the veld may be burned in summer.

The entire eastern portion of Namaqualand, up to the edge of the Kliprand, falls within the Succulent Karoo Biome. The soils, like those of the adjoining Nama-Karoo, are

"lime-rich, weakly developed soils on rock" (Rutherford & Westfall 1986:60). These soils are easily erodable and the deep gulleys and sheet erosion evident today are ascribed to "overgrazing of the originally sparse vegetation cover" in historical times (Rutherford & Westfall 1986:60). This biome has the highest succulent plant species diversity in the world. Rutherford & Westfall (1986) speculate on the slow rates of vegetation change in this biome and conclude that perennial grasses may never have been an important characteristic of the western Karoo. Even areas protected from grazing for 50 years show little increase in grass cover and Van Rooyen and Grobbelaar (quoted in Rutherford & Westfall 1986:61) "found no identifiable grass species in the seed bank of the area". Nor does fire appear to be common in the biome. The biome is divided into two regions with the division falling between the 115mm and 125mm isohyets. The more arid region includes most of the coastal plains while the less arid region incorporates the broken veld, hills and mountains. The carrying capacity for domestic stock (mainly sheep and goats) is even lower than for the Nama-Karoo and is estimated to be as low as 9 ha per SSU. The carrying capacity of the veld on the Kamiesberg has been estimated by Archer *et al.* (1989) to be 7 ha per SSU although heavily overgrazed areas may be as low as 12 ha per SSU.

ARCHAEOLOGICAL INVESTIGATIONS IN THE KAMIESBERG

Wolfkraal

Wolfkraal is situated near the little village of Twee Rivieren (Fig.2), first referred to by Alexander in 1838. Excavations were undertaken at the site in 1983 and are discussed at length in Webley (1984). Because of the very ephemeral evidence for LSA occupation radiocarbon dating was not undertaken.

Formal artefacts consisted of a few scrapers and MRPs and amounted to 0,2% of the lithic total (Table 14). A total of 60 potsherd fragments were recovered but the pottery was adiagnostic, containing no decoration and only one rimsherd. The sherds were only 4 mm thick on average which is thinner than the mean for other sites investigated from Namaqualand. A single ostrich eggshell bead was discovered and the faunal sample was unremarkable,, containing mainly small bovids and tortoise. The remains of a female

Table 14. Wolfkraal: lithic inventory.

	S	CBL	DBL	DBL2
Chips	933	983	1070	1153
Chunks	143	586	561	540
Cores	8	3	4	5
Flakes	116	210	249	276
Core red.pieces	-	-	1	2
Blade	-	-	-	1
Snapped blade	-	1	1	-
P.esquillées	-	-	1	-
Total Waste	1200	1783	1887	1977
Utilized flakes	1	6	-	9
Total utilized	1	6	-	9
Scrapers	2	2	2	2
Backed scraper	-	-	-	1
M.R.P.	-	2	1	1
Backed flake	-	1	-	-
Total formal	2	5	3	4
Grand total	1203	1794	1890	1990

Khoisan individual from a disturbed area in the site confirms that it functioned as a burial area during the past. Wolfkraal, like Keurbos, discussed below, contains substantial evidence for Middle Stone Age occupation.

Keurbos Cave

Keurbos cave is located in the most southerly part of the Leliefontein Reserve in the foothills of the Kamiesberg mountains (Fig.2). This area is allegedly visited on a seasonal basis by present-day pastoralists in the reserve. The cave is situated just across from the boundary fence and next to a gravel road, approximately 15 km from the town of Garies. The cave forms an extremely large, circular area (about 100 square metres in extent) carved into the granite bedrock of the Wilgerhoutsrivier. After the winter rains a waterfall flows down the rock face to the left of the cave. According to the owner of the adjoining farm Modderfontein, the river itself has not flowed into the cave in living memory. The deposit at the back of the cave was extremely dry and powdery, affording, it was hoped, an opportunity to recover well-preserved organic remains for ethnobotanical identification. In addition, the apparent depth of deposit (of at least a metre) held promise of establishing a chronological sequence of late Holocene occupation in the mountains.

Three square metres were excavated; the surface deposit consists of a loose brown, disturbed soil of some 5 cm in depth. Pieces of glass and china occur with stone artefacts. Unit 1, as well as the underlying units, is a gritty grey-brown deposit rich in roof spalls. Unit 1 would appear to be a transitional unit between the surface Holocene and the Middle Stone Age which occurs below. A shallow pit or burrow from the surface unit in G8, located near the cave wall, provided the only faunal remains from the site. In addition potsherds, and ostrich eggshell beads were also recovered. This 'pit' clearly relates to the late Holocene and the sample appears to have some integrity. It is unlikely to be a bedding hollow because of the abundance of stone artefacts but may well be similar to the pits found at /Ai tomas.

Units 1-3 were very rich in roof spalls and the soil became increasingly compacted, possibly due to leaching. Leaching appears to be indicated by the absence of faunal and other organic remains. Although charcoal fragments were found scattered throughout the deposit, discrete hearths could only be identified in the surface unit. We stopped excavations at Unit 3 as it was apparent that the lower units, containing large flakes with facetted platforms as well as large segments, probably dates in excess of 30 000 years.

Stone artefacts: a total of 5162 artefacts were recovered from three square metres, excavated on average to 20 cm. Stone artefact frequency stays fairly constant with a mean of about 90 artefacts per bucket.

The surface unit and the 'pit' contained eight out of the total of ten formal tools (Table 15). There is one scraper, two adzes, one MRP, one backed blade and one backed flake. The other two formal tools (a truncated blade with lateral retouch and a large segment) support the conclusion that the top 30 cm of deposit appears to have been substantially churned up. Two ochre pencils and seven ochre fragments occur in the surface units.

Unit 1 contains no formal tools, one utilised MSA flake and at least four MSA flakes with convergent points. There are ten ochre pencils and one piece of ochre.

Unit 2 contains one backed bladelet and one MRP. There is one utilised flake with a facetted platform, one ochre pencil and 6 pieces of ochre.

Unit 3 contains two MSA-type flakes and one MSA blade with utilisation damage. There is one ochre pencil and 6 pieces of ochre.

The majority of artefacts fall into the unretouched flake category but flakes with facetted platforms are most common in Unit 3.

Ochre occurs in much larger frequencies than at any other site sampled thus far in Namaqualand. The ochre pencils suggest that they may have been used in rock art; however, the extensive graffiti on the cave walls make it impossible to determine whether this did occur. There is also an absence of any grindstone fragments in the deposit or any grinding grooves in the granite bedrock in the surrounds of the cave. The majority of stone artefacts, in all categories, were made on quartz and there is no significant difference in the choice of raw material between the Holocene and Upper

Table 15. Keurbos Cave: Lithic artefact inventory.

	Surface	Burrow	Unit 1	Unit 2	Unit 3
BUCKETS	14	8	15	7	8
Chips	413	458	340	100	108
Chunks	125	70	193	153	140
Flakes	721	460	756	348	367
Cores	14	8	15	7	8
Bladelets	9	2	21	-	-
Blades	0.5	2	7	1	3
Flaked cobble	3	1	4	5	-
Lithic Manuport	3	2	-	-	-
Ochre pencils	7	2	1	1	6
Waste Total	1355	1061	1390	642	674
Utilised flakes	2	1	8	5	5
Utilised Total	2	1	8	5	5
Scraper	1	-	-	-	-
Adze	2	-	-	-	-
M.R.P.	1	-	-	1	-
Misc. backed	1	1	-	1	-
H.P. segment	-	1	-	-	-
Retouched blade	-	1	-	-	-
Formal Total	5	3	-	2	-
Grand Total	1362	1065	1398	649	679

Pleistocene layers. Silcrete, chalcedonies, quarzite, shale and granite are present but in small numbers. In general, the surface units could be classified as Holocene while Units 1-3 are of MSA origin. There is probably a fairly long MSA sequence at the site but the complete absence of mid-Holocene deposits is remarkable and ties the site in closely with Wolfkraal.

Other cultural material: a total of five potsherds was recovered from the surface and the burrow. There are no diagnostic pieces. A total of eight ostrich eggshell beads was found in the surface burrow, ranging in external diameter measurements from 4,1 mm to 5,4 mm. There were no unfinished beads and no ostrich eggshell fragments.

Dietary Information

Fauna: bone was only recovered from the pit in G8. The small faunal sample was examined by Parkington who identified eight dassie (*Procavia capensis*) individuals. Tooth eruption patterns suggest the following mortality profile:

November - one individual

February to May - two individuals

January to February - one individual

March to April - four individuals

There is no evidence of any carnivore damage on the bones and if the dassie remains are indeed due to human predation, then the evidence would point to summer grading into autumn occupation being responsible for the pit accumulation.

A number of small open sites were located near the Keurbos cave. There are at least two sites above the waterfall, next to large boulders but neither has any depth of deposit. It is significant that both Wolfkraal and Keurbos contain very ephemeral late Holocene deposits overlying substantial Middle Stone Age occupation horizons. In sites, therefore, where one would expect to recover pre-2000 BP Holocene deposits, none occurs. The very scanty post-2000 BP deposits at these sites suggest that neither functioned as important occupation centres. Other rock shelters in the foothills of the Kamiesberg have also been examined for depth of deposit. They include Roodebergskloof, Letterklip, Arkoep (it was located close to a small stream and two grinding grooves were observed in the granite banks), Brakdam and Brakkies, the last

consisting of a single complete pot and a grooved stone ploughed up by a farmer in a wheat field. It would appear from my survey of the area in March 1987 that sites which would have shown clear evidence of occupation in the western Cape during the last 2000 years were almost completely ignored in Namaqualand.

THE KAMIESBERG MOUNTAINS

Numerous surface surveys were undertaken both within the boundaries of the Leliefontein reserve and on adjoining farms on the top of the Kamiesberg mountains. No substantial sites were located and the review offered below is a synthesis of fragmentary data collected from various sources. The historical accounts (presented in chapter 2) very clearly state that Namaqua kraals were located on the mountains during the summer months. In addition, these people were under constant threat of attack by 'Bushmen' during the 19th century. In my opinion, the large open encampments of the Namaqua must now be virtually completely destroyed by almost two centuries of grain cultivation. Occasionally, someone recovers a complete pot, obviously deliberately stored near some large boulder, or picks up a stone pipe or grooved stone in a ploughed land. These finds are becoming increasingly rare.

Modderfontein

A few small excavations were undertaken of several scatters of potsherds and stone on the farm Modderfontein (Fig.2) which, according to oral tradition, was one of the main settlement areas (stasies) of the Namaqua during the early nineteenth century. There is a permanent spring next to the homestead which has not dried up in living memory. A grinding groove on a nearby granite boulder and numerous 'Bushmen' graves on the farm attest to pre-colonial occupation. All available level land on the farm has been under wheat cultivation since 1820. In a survey of the farm two artefact scatters were located on the slopes of a kopje overlooking the spring and both were sampled.

MFA 1: this kopje is some ten metres from the fountain and about eight metres above the surrounding terrain. An area rich in potsherds was first selected and after the surface material was collected, excavations were undertaken. The localised distribution

of the sherds suggest that they all derive from the same vessel. A grid was set up some five metres from the pottery concentration in order to sample the stone artefact area. After a surface collection of 13 square metres, a further 5 metres were excavated. It appears that there is no stratigraphy and no depth of deposit to the stone artefact distribution. Finally, a further collection of potsherds on the western slopes of the kopje (some five metres from the spring) was also undertaken.

Stone artefacts: the stone artefact sample included chips, chunks, flakes and cores (Table 16). There were four utilised flakes and one grooved soapstone pebble. Of the formal tools, four scrapers were recovered from the surface and one from Unit 1. The scrapers are all fairly small and not of a uniform morphology. There are two backed flakes from the surface and one MRP each from the surface and from Unit 1. Although quartz is the most common raw material, chalcedony and silcrete also occur.

Pottery: a total of 114 potsherds were recovered from the three areas sampled around the kopje. Five rim sherds were recovered, namely two round rims, one flat rim, one tapering rim and one externally thickened rim. There was no decoration present. The sherds were all very friable, due in all probability to the coarse grit temper, and the majority had a black slip on the inside and outside. A few sherds had a reddish slip on the outside. The average sherd thickness is 7,1 mm which is slightly thicker than that obtained from other sites in the region. A very unusual find, in the shape of a fragment of a pottery pipe stem, was recovered from the surface. Although the bowl was missing the shape of the pipe can be determined and it is evident that it is an imitation of the soapstone pipes commonly found in Namaqualand and further afield. The thin bore diameter of the pipe was possibly manufactured by using a metal rod or a thin reed. The clay used in its manufacture is not as coarse-grained as the rest of the pottery found on site and suggests a different source. The pottery pipe stem is clearly of aboriginal manufacture and may be dated to after the arrival of the first Dutch settlers in the Cape. This is the only example of a ceramic pipe which I have discovered in Namaqualand; they are generally of soapstone. Nevertheless, the ceramic pipe bowl indicates that the site probably post-dates 1700 AD, when, according to Laidler (1938:2), "smoking was established among all the tribes, including the Bushmen". Smoking pipes are discussed

Table 16. Modderfontein: lithic assemblage.

	N4	U5	F4	U7	M11	O7	O12	J10	L9	S26	M13	E7	L10	Q5	Surface total
Chips	9	9	1	-	11	7	-	6	14	2	11	1	6	-	77
Chunks	2	6	-	-	2	4	-	-	2	-	1	-	1	-	18
Flakes	3	5	1	-	9	11	-	4	7	-	2	1	9	-	52
Cores	2	4	1	-	4	6	-	3	8	1	3	2	2	-	36
P. esquillées	-	-	-	-	1	-	-	-	-	-	1	-	1	-	3
Fe fragments	1	-	-	-	-	1	-	-	-	-	1	-	1	-	4
Ochre	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
Total Waste	17	24	3	-	27	29	-	13	31	3	19	4	21	-	191
Utilised flakes	1	-	-	1	-	2	-	1	-	-	-	-	-	-	5
Grooved pebble	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Total Utilised	2	-	-	1	-	2	-	1	-	-	-	-	-	-	6
Scraper	-	-	-	-	-	-	1	-	1	-	1	-	-	1	4
Backed piece	-	1	-	-	-	-	-	-	1	-	-	-	-	-	2
M.R.P.	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
Total	-	1	-	1	-	-	1	-	2	-	1	-	-	1	7
Grand total	19	25	3	2	27	31	1	14	33	3	20	4	21	1	204
Pottery	-	1	2	-	1	1	-	-	-	25	-	1	-	-	31

at greater length in chapter 3. No bone or ostrich eggshell pieces were found on the site.

MFB: There is a natural pass on the farm between two mountain peaks through which livestock was traditionally herded down into the Sandveld. This pass leads down to Arkoep, discussed earlier. Near the top entrance of the pass is a small kopje with evidence of prehistoric occupation on its slopes. There are many small potsherds pieces eroding from the soil on the southern slopes of the kopje, immediately above the top of the plough zone. A grid was set up over the densest scatter and the surface sherds collected. It is a fairly localised scatter associated with a few quartz flakes and chips. Some 25 sherds were recovered from nine square metres and a further nine sherds from the excavation of a single square. The sherds were more fine-grained than those from MFA, many have an outer red slip.

It is unlikely that the Modderfontein samples will sigificantly increase our understanding of the later prehistory of the mountainous area. Nevertheless, the fact that the site was probably occupied post-1700 AD means that formal tools are associated with ceramics during this period in the mountainous regions as well as in the Sandveld. Excavating small sites such as Modderfontein increases our knowledge of the variability exhibited by archaeological sites in the region.

Other sites investigated in the mountains include: Olienfontein, Agtertuin and Eenwilger, none with any depth of deposit. Tat se Gat, near Paulshoek, is a small shelter under a large boulder. It has an interesting history. According to local informants two old 'Bushmen', namely Tat and !antip lived there for a time, raiding the stock of nearby farmers and only venturing out at night to collect water at a nearby stream. The local minister became interested in the story and excavated the shelter, removing, so I was told, the yellow bones of the goats they had raided as well as many potsherds. The shelter is very small and unfortunately most of the deposit has been removed; an ashy area rich in grass and bone fragments and containing a chalcedony flake and ostrich eggshell fragment remains.

Groot Nourivier is located in the Leliefontein reserve and during the last two decades a Mr Heyns has recovered many objects in the vicinity of his house. Two complete pots were found buried near some large boulders after heavy rains exposed their rims. While ploughing near the river Mr Heyns came across what he described as an old 'staaning' (stockpost settlement) evident from the deflated ash heap. He recovered from this ash heap half a bored stone, a lower grindstone, a soapstone pipe and ostrich eggshell pieces.

ETHNOGRAPHIC OBSERVATIONS ON PASTORAL LAND USE

I have noted in chapter 3 that the Little Namaqua do not appear to have had a clearly formulated concept regarding the extent of their 'territory'. Other tribes have described the boundaries of the area inhabited by them but this seems also to have been subject to considerable flux. It was the absence of clearly defined boundaries which made it so easy for the trekboers to settle in Namaqualand and which resulted in the very rapid loss of Namaqua pasturage. Historical accounts of seasonal transhumance among the Namaqua are briefly described in Appendix 2. According to Wandres (1908), the whole 'tribe' owned the land and it was the chief's duty to see that it was not divided up. Individual families only had usufructuary rights to their settlement locations and grazing grounds. The grazing right was a common one. If an individual intended burning the grass prior to the rainy season, he/she required the consent of the chief. The main purpose of burning old dry grass, was to "attract the game", and not, to improve the pasturage for the stock. Wells could be sunk jointly by several families but the well itself remained the property of the 'tribe'. Strangers had the right to use the water from the well (Wandres 1908) but Hoernle' (Carstens *et al.* 1987) claimed that other nations had to obtain permission to use the water and salt within a particular tribe's territory. Similarly, other tribes had to obtain permission to bring cattle into a neighbour's territory. No payment was exacted if permission was requested but if people came without asking, then half their stock was taken as payment.

Ethnographic observations on pastoral land use in central Namaqualand have been discussed at length by Webley (1982, 1984, 1987). Briefly, it would appear that until fairly recently, pastoralist groups have generally aggregated at permanent waterholes

on the Kamiesberg mountains during the summer months and dispersed down into the Sandveld in winter. A number of environmental factors have favoured such a transhumance cycle. Winters on the Kamiesberg are severe, snow is not uncommon and large stock losses may be experienced, especially among the lambs which are born at this time of year. Furthermore during the winter the smaller rivers and streams in the Sandveld may flow for a short period, allowing herder groups to utilise grazing areas which may be inaccessible during summer droughts. During the months April to October, groups dispersed in the foothills of the Kamiesberg in areas such as Bethelsklip and Kharkams. They therefore allowed the vegetation around the waterholes on the mountains to recover so that it could be used again the following summer. An examination of the rainfall (Fig. 3) and vegetation (Fig. 4) maps for central Namaqualand confirms that pastoralists could exploit several different ecological zones by following a transhumance cycle of less that 50 km.

In addition local herders also distinguish between sweet and sour veld (Archer in prep.). The higher mountainous areas around Leliefontein are considered to have sweet veld while the Paulshoek, Rooifontein and Nourivier areas are characterised by sour veld. Sour veld is said to mature more rapidly and for this reason pastoralists move down from the higher-lying regions after the winter rains to utilise this pasture (generally for a six-month period) after which they return to the sweet veld which has had time to mature. Sourveld is generally considered to have a lower carrying capacity than sweet veld. Similar observations regarding the seasonal exploitation of sweet and sour veld have been made in other parts of the country (Dr A. Palmer, Department of Agriculture pers. comm.) suggesting that this may have empirical support. In addition herders also need to avoid various plants which become poisonous at certain times of the year. These are discussed at length in Webley (1984:77-78). Plants generally exhibit greater toxicity in spring while *Tylecodon wallichi*, which occurs in the karoid areas such as the Kliprand, causes 'krimpsiekte' during summer. Stock are generally able to identify and avoid poisonous plants, however, lambs, because they graze with less discernment than adults, are at greater risk. Animals which are introduced to an area with vegetation different from that to which they are accustomed, may also be more susceptible to plant poisoning. This is an important point to bear in mind when considering the fairly rapid movement of domestic stock into the southern Cape.

With respect to grazing livestock on the coastal plains, it would appear that the most important limiting factor is lack of water in the summer months. Rivers may flow briefly after winter rains and water collects in pools in the estuaries for a month or more. According to De Kock (1983) the carrying capacity of the veld south of Brand se Baai (Fig. 2) is approximately 3,5ha/ssu but this is believed to decline rapidly northward with the decrease in rainfall. The optimum period to graze stock on this veld is from June to mid-December. A considerable decline in the carrying capacity of the veld is experienced after January. Sheep are currently grazed on the Strandveld vegetation throughout the year but water is provided by windpumps, while the vegetation shows signs of overgrazing. The veld is not suitable for grazing cattle and the Kleinsee mine provides its herd of dairy cattle with feed. The historical accounts make no mention of pastoralists from the mountains moving down to the coastal belt but they do indicate that groups of people were living along the coast, some with livestock (Appendix 2).

We know from the historical records that pastoralists in the Leliefontein area also made sporadic use of the fringes of western Bushmanland. This region experiences most of its precipitation in the form of thundershowers during the summer months. Pastoralists pasture their stock on the palatable grasses (Hoffman 1988) during the months January to March. *Tribulus terrestris*, commonly encountered on overgrazed land in the Karoo, is an important source of stock poisoning in this region. Ingesting this plant during hot dry spells following summer rains may result in 'geeldikkop'. The lack of standing water (except for rainwater which collects in the granite basins around the numerous pans in the region) means that stock cannot be kept in Bushmanland throughout the year.

I provide below a table indicating the carrying capacity of the veld for the various ecological zones discussed in this chapter as well as for the Richtersveld which is described in the following chapter.

Coast	Sandveld	Kamiesberg	Western Bushmanland	Richtersveld
±5ha/ssu	6-8ha/ssu	7ha/ssu	5ha/ssu	7-10ha/ssu

These estimations are based on veld which has not been severely overgrazed. It is immediately apparent from the table that a great deal of variability is experienced in each zone. The carrying capacity of the Sandveld, for example, varies from north to south (with increasing rainfall), while the rugged topography of the Richtersveld means that areas separated by only a few kilometres may have quite different carrying capacities. Hjort (1982) has levelled a number of criticisms against the concept 'average carrying capacity' for these reasons. In addition the "the purpose of pastoral production and the standard of livestock maintenance" (Hjort 1982:13) that may have been acceptable to the Khoekhoen may not have been the same as they are for current European stock farmers. For these reasons the nutritional values of the pastures in each of the ecological zones under discussion is considered to be a more reliable index for models of livestock management. Unfortunately the data from this region are very inadequate (Dr A Palmer, Department of Agriculture, pers. comm.). In general it has been remarked that the mineral values of the annual plants in the Namaqualand region are high but protein values are generally low, with the consequence that the region is really only suitable for small stock farming. Historical accounts, however, emphasise that cattle were extensively grazed on the Kamiesberg which suggests that sophisticated models of livestock management which have been constructed by agricultural experts should be applied with caution to the prehistoric period.

In discussions with an agricultural officer (Dr. A Palmer, pers. comm.) it was suggested to me that the most significant constraining factor in Namaqualand for prehistoric pastoralists is likely to have been the availability of surface water rather than the status of the pasture. In a survey conducted by Redelinghuis (1981:146) 60% of the farmers in the rural areas of Namaqualand cited water (or the lack of it) as the single most pressing consideration facing them. It has been my intention with this review to show that historical accounts of pastoral landuse generally dovetail with contemporary ethnographic observations and environmental data. We may conclude that pastoralists would have followed similar patterns in the past but we would do well to remember, that "animal movements and grazing patterns organized by people are influenced by social and economic changes" (Hjort 1982:24). Simple extrapolations from the present into the prehistoric past are not always possible or desirable.

6. THE ARCHAEOLOGY OF BUSHMANLAND AND THE RICHTERSVELD

In this chapter the archaeology of the Bushmanland escarpment as well as the Richtersveld in northern Namaqualand is presented. Both regions are characterised by their extreme aridity, but here the similarity ends. The rainfall regime and vegetation history of these two regions is quite different and each area is discussed separately. Ethnographic observations on pastoral land-use have already been presented for Bushmanland in the previous chapter and will not be repeated here.

THE KLIPRAND AND WESTERN BUSHMANLAND

East of the Kamiesberg range is a series of ridges called the Kliprand which merges into the tableland of western Bushmanland. The granite pans of western Bushmanland are characterised by calcrete outcrops which are elongated in the strike direction of the dunes and red-brown aeolian sands (Lloyd 1985). The pans are situated in the transitional zone between the winter rainfall area of Namaqualand and the summer thundershowers characteristic of Bushmanland. Lack of adequate rainfall data means extrapolations have to be drawn from stations at Pella and Upington, both considerable distances away. The rainfall is erratic and unreliable. Precipitation is mainly due to convectional showers in summer and autumn. The mean annual rainfall is probably greater than 100-150 mm. Mist and fog may be an important source of moisture for certain plants. Frost is common in winter, occuring between 30 to 180 days of the year. There are large seasonal and diurnal variations in temperature. The summer mean daily maximum temperature is 31 degrees C while the winter mean daily minimum temperature is 5 degrees C. Although wind (generally from the south-east and north-west) is an important environmental factor in both Namaqualand and Bushmanland there is a general lack of data in this regard.

Frummel Bakkies is only a few kilometres east of the Vaalputs nuclear disposal site which is located at an altitude of 1000m. According to Acocks (1975) the vegetation

in this area is False Succulent Karoo which, maintains Rutherford & Westfall (1986), suggests that it forms part of the Nama-Karoo Biome. According to Hoffman (1988) a climax Karoo is characterised by palatable perennial grasses and shrubs. The carrying capacity of the veld at Vaalputs was 9 ha per sheep in 1983, although Lloyd (1985) is of the opinion that over-grazing has had a considerable impact on the vegetation composition. According to her, grazing intensity has changed the structure and accelerated the degeneration of the Karoo vegetation by increasing the number of unpalatable shrubs. Before the advent of pastoralism, the veld was grazed and browsed by migratory herds of springbok, etc. Farming with cattle has been largely replaced since 1943 with sheep and goat farming. The early trekboers used the veld intensively for short periods of time after rains. However, since 1916 (when the last of the Crown Lands in the vicinity of Vaalputs was taken out) the veld has been used on a more seasonal, selective basis. Today the region is used for the grazing of sheep and the carrying capacity of the veld is estimated to vary between 1 ha/ssu in the eastern area to 5 ha/ssu in the more arid Bushmanland.

ARCHAEOLOGICAL RESEARCH IN WESTERN BUSHMANLAND

Information obtained from my Leliefontein informants suggested that their ancestors had visited a number of localities in Bushmanland during the recent past (Webley 1984; 1987). Sites mentioned include Maan se pan, Suurwater, Leeuklip, Bitterputs, Bosluis se pan and Leeuvlei (Figure 2).

Frummel Bakkies

Frummel Bakkies is an open pan site located on the edge of the Kliprand in the Koa river valley to the south of sites such as Galputs, Bitterputs and Suurwater. I selected Frummel Bakkies for further investigation because (a) my informants in Leliefontein reported visiting it in the past and (b) it has the greatest density of potsherds observed at any of the pan sites visited in Bushmanland (discussed below).

Mrs Maria Kotze (born 1900) related how her husband had bought the farm in 1941. Her family had moved around seasonally in Bushmanland ever since 1913, trekking

down to the Groen River in winter. When she and her husband first came to Frummel Bakkies in 1941 there was not a drop of water in the 'klipbakke' (rock basins). However, after good rains the water in the hollows could last for up to six months if conservatively used. Indeed, farmers from nearby used to come and collect water from them before boreholes became common in the area. Although a lack of water is a limiting factor on the farm, grazing is also inadequate to support stock throughout the year. The farmer told me that sheep could not be kraaled at night but had to graze in order to obtain enough to eat.

There are at least three large, flat granite areas near the house with deep depressions in which rain water collects after summer storms (Fig. 18). According to the Kotzes however the hollows have been considerably enlarged by dynamite. Two of the hollows are also enclosed with stone walling in a further attempt to increase their capacity. The hollows are regularly cleaned and heaps of sand containg stone artefacts and pottery are piled nearby. There are a large number of oval grinding hollows around these depressions. They are similar to the grinding grooves observed at the majority of other pan sites in western Bushmanland as well as the grooves found in the Kamiesberg. A series of shallow 'pans' extends from the granite basins beyond the fence (Fig. 18) and it was this area which formed the focus of the archaeological investigations. By moving further away from the pans I hoped to avoid possible recent disturbances such as those listed above. In addition, sites located further from the water are less likely to have been re-occupied and the possibility of locating discrete living floors is considerably enhanced.

The topography of the area around the pans is very monotonous. It comprises (a) slight rises (too small to be termed dunes) of red/brown aeolian sand, often associated with bushes and frequently mined by dune molerats to a depth of 15 cm. However, there still appeared to be some degree of coherency in the groups of potsherds located on these sands; and (b) very slight deflations with a calcrete base. These deflations wind between the red sands for considerable distances. Often they are covered by thin scatters of ostrich eggshell fragments and an occasional potsherd or artefact.

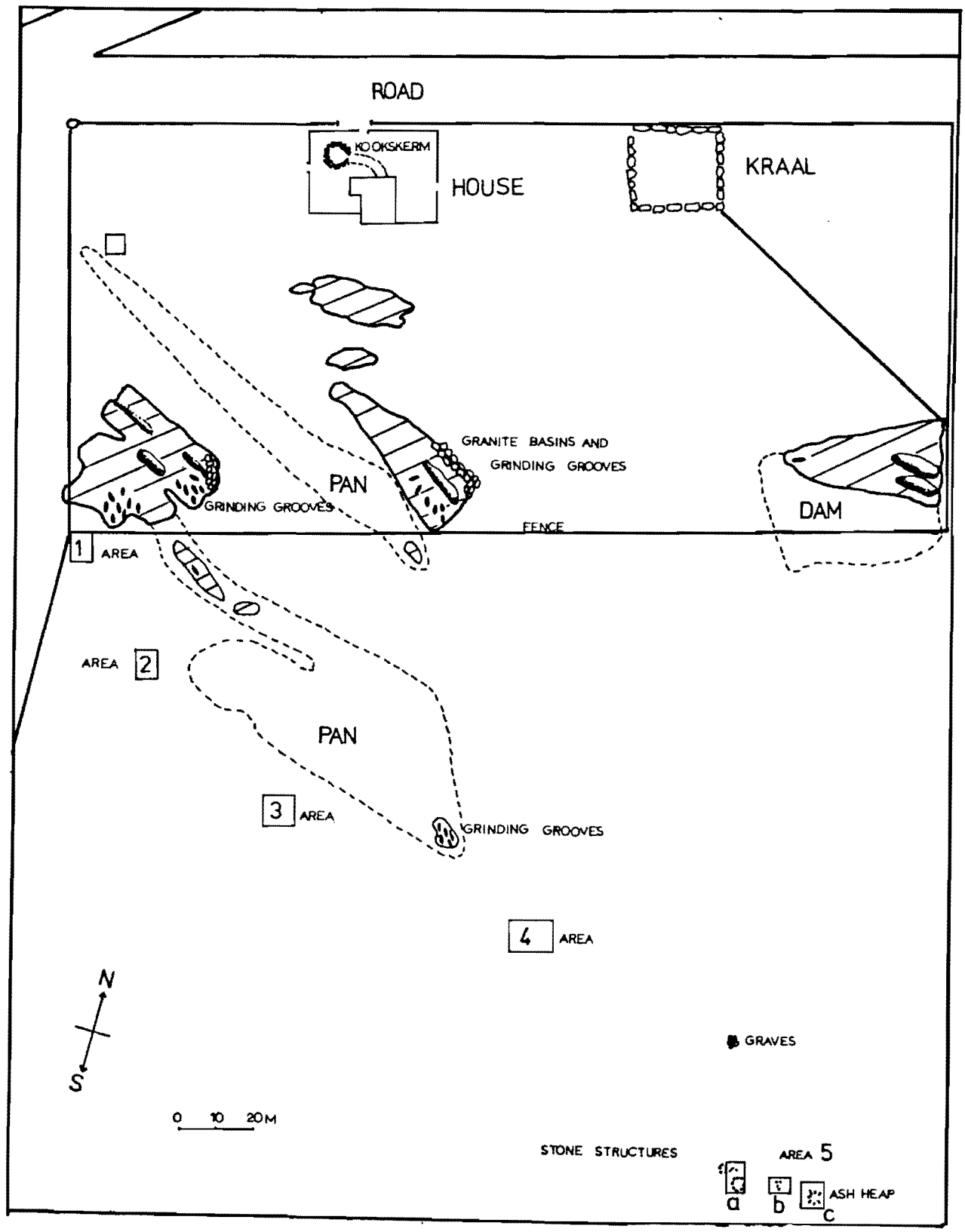

Fig. 18. Site plan of Frummel Bakkies.

Excavations were undertaken beyond the fence during January 1988 and five different areas were sampled. Each area appeared to me to consist of a discrete cluster of artefacts and were specifically chosen because they were rich in potsherds. The fence, running along the southern edge of the 'klipbakke', formed the baseline of a very extensive grid system enclosing an area of over four hundred square metres. Initially, my excavation strategy entailed removing the top 5 cm of soil from each square and sieving it through a 3 mm mesh sieve. By removing the surface gravel and small bushes, however, I was contributing to an increase in duststorms and I soon became concerned about the effect this might have in destabilizing the vegetation cover of grazing around the farmhouse. For this reason, I changed my excavation strategy and surface collections were made by painstakingly scraping a trowel across each square and recovering all the material from the top 5 cm. Apart from surface collections, excavations were also undertaken of promising areas. Although no apparent stratigraphy was evident (with the exception of the ash heap in Area 5), the soil in the majority of excavated squares appeared to be lighter and more ashy than the surface deposit.

Area 1

An area of 8 x 6 m next to the boundary fence was sampled because of a clustering of stone artefacts, pottery, ostrich eggshell pieces and beads (Fig. 19). The stone artefact density in this area amounted to 6,3 artefacts per square metre. The surface unit contained a number of backed pieces (Table 17) showing all the stages of the reduction sequence illustrated by Deacon (1976) and Leslie-Brooker (1987). Approximately half of the waste artefacts were made on quartz with the balance made up of silcrete, chalcedony, quartzite and indurated shale.

There are eleven potsherds from the surface collection. None is decorated and there are no rims. The pottery is grit-tempered and the mean thickness is 5,8 mm. Three complete and one broken ostrich eggshell beads were recovered. One square metre was excavated and Unit 1 contained three formal tools, including one scraper, and four potsherds. There were no formal tools in Units 2 and 3.

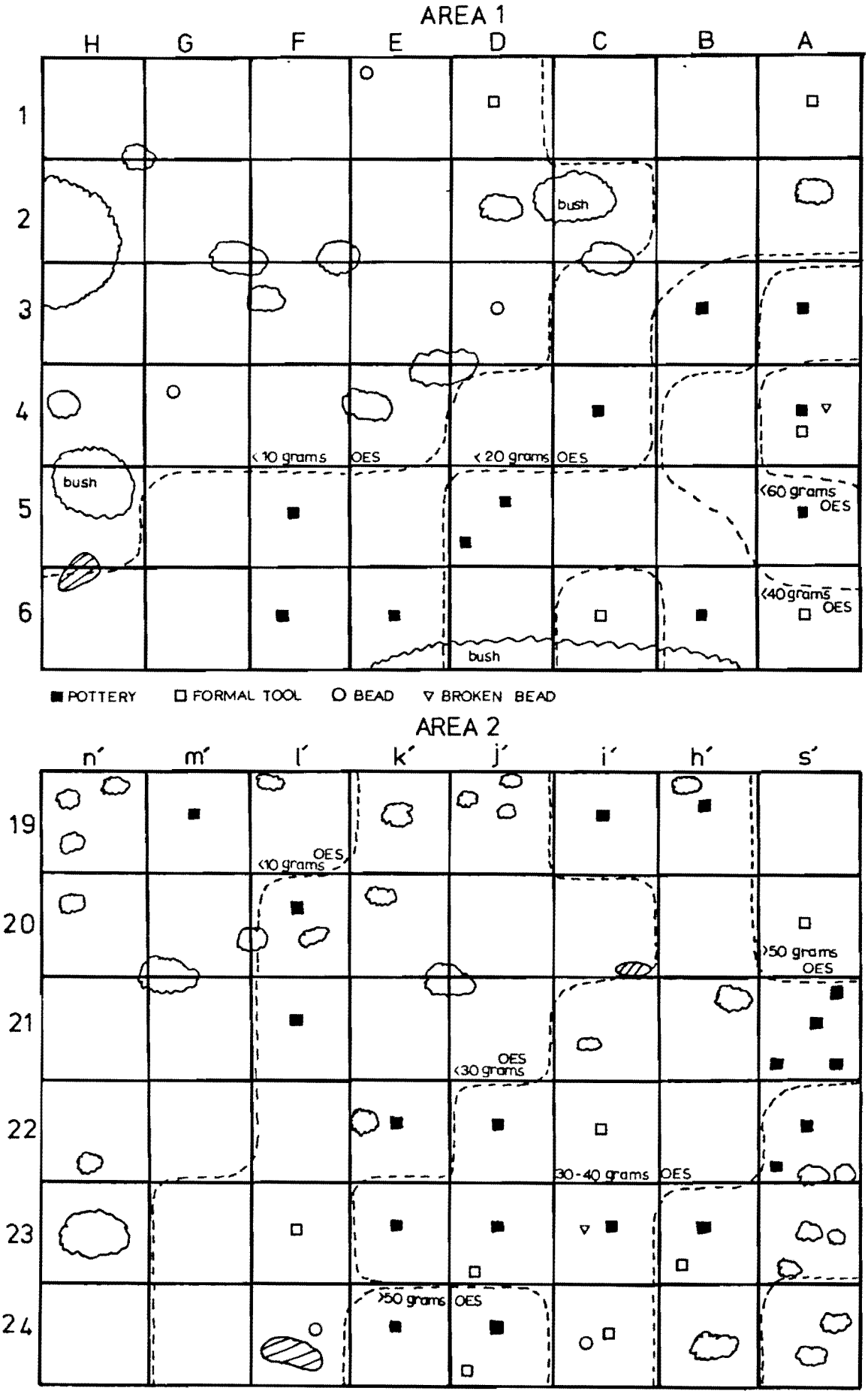

Fig. 19. Frummel Bakkies. Floor Plan of Areas 1 and 2. Each square represents 1m x 1m.

Table 17. Frummel Bakkies: Lithic artefact inventory Area 1 (48 m)

	Surface	Unit 1	Unit 2	Unit 3
Chips	95	12	12	13
Chunks	36	9	2	3
Flakes	146	13	17	39
Cores	13	-	1	8
P.esquillées	1	1	-	-
Bladelet	6	-	3	2
Lithic Manuport	3 haematite	-	1 C	1 qzte pebble
Waste Total	297	28	36	66
Utilised Flake	4	-	-	-
Utilised Total	4	-	-	-
Scraper	-	1	-	-
Backed bladelets	1	1	-	-
Backed points	2	-	-	-
Backed flakes	2	-	-	-
M.R.P.	1	1	-	-
Formal Total	6	3	-	-
Grand Total	307	31	36	66

Area 2

This particular area was selected because of the presence of a large pottery lug in association with a rather thin scatter of artefacts situated on a gentle rise of aeolian sand (Fig. 19). Once again, an area of 8 x 6 m was sampled. The stone artefact density for this area is 7,2 artefacts per square metre, similar to that of Area 1. A total of seven backed bladelets and flakes was found on the surface and a number of unretouched bladelets also occur in the waste category (Table 18). Quartz artefacts are less than in Area 1 and there is a small but significant increase in chalcedony and quartzite.

There are 19 potsherds from the surface sample and no diagnostic pieces with the exception of the lug. The majority of the potsherds are grit-tempered; however, four were found to contain some grass admixture as well. Two complete and two broken ostrich eggshell beads were recovered. One square metre was excavated and bedrock, consisting of round pebbles and loose pieces of granite, was reached at 15 cm. The excavations produced no formal tools in Unit 1, two MRPs in Unit 2 and three scrapers and two backed flakes in Unit 3. One grindstone fragment was also found in Unit 3. A total of eight potsherds was recovered.

Area 3

An extremely dense distribution of potsherds (Fig. 20) in this area necessitated enlarging the grid to be sampled to 9 x 8 m. Stone artefact density amounted to 7,7 per square metre, similar to the two sites discussed earlier. There are fourteen formal tools; one scraper, one MRP, four backed flakes and eight backed bladelets (Table 19). Quartz artefacts amount to over 60% of the total.

The pottery sample amounted to a remarkable 508 sherds and although 12 rims were identified there are no decorated pieces. The rims were either flat or bevelled. The majority of the sherds in this sample contained both grass and grit temper; there appeared to be no sherds with an exclusively grass temper. The grass in the temper does not noticeably increase the potsherd thicknesses: a mean of 6,0 mm was measured. Outside surfaces were either red/brown or black but there are no highly burnished slips. Only one unfinished ostrich eggshell bead was found in this collection confirming the

Table 18. Frummel Bakkies: Lithic artefact inventory Area 2 (48 m)

	Surface	Unit 1	Unit 2	Unit 3
Chips	49	9	41	18
Chunks	47	5	20	8
Flakes	197	15	70	67
Cores	18	-	13	23
P. esquillées	1	-	-	-
Bladelets	10	-	4	6
Lithic Manuports	11	-	1	3
Ochre	1	-	-	-
Waste Total	334	29	149	125
Grindstone frags.	-	-	-	1
Utilised Flakes	4	-	-	-
Utilised blades	1	-	-	-
Utilised Total	5	-	-	1
Scrapers	-	-	-	3
Backed bladelets	3	-	-	-
Backed flakes	4	-	-	2
M.R.P.	-	-	2	-
Total	7	-	2	5
Grand Total	346	29	151	131

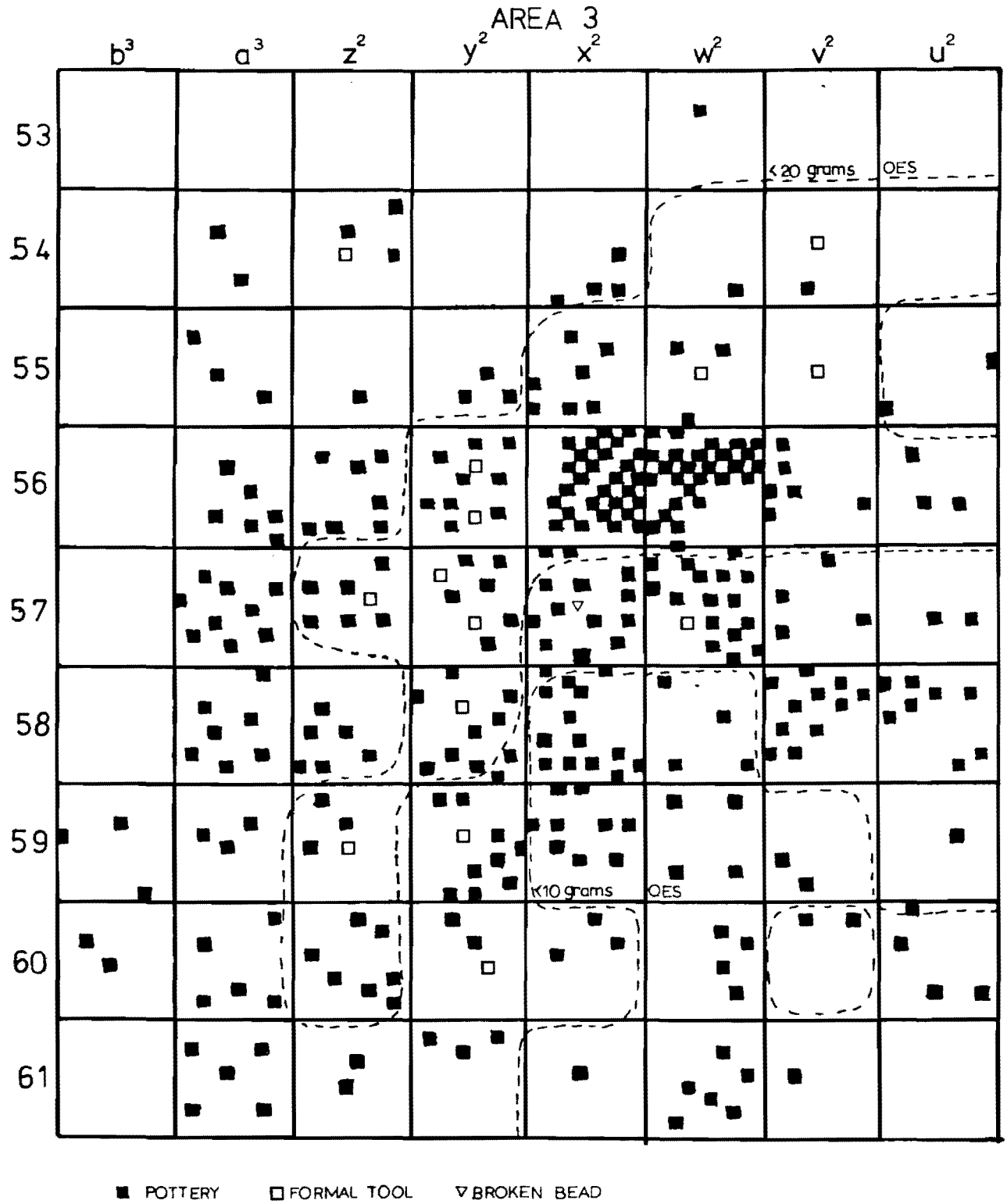

Fig. 20. Frummel Bakkies. Floor Plan of Area 3. The density of ostrich eggshell fragments is indicated on the map.

Table 19. Frummel Bakkies: Lithic artefact inventory Area 3 (72 m).

	Surface	Unit 1	Unit 2	Unit 3
Chips	293	-	6	7
Chunks	25	-	-	2
Flakes	177	2	17	2
Cores	12	-	2	1
Bladelet	20	-	-	-
Lithic Manuport	1	-	-	-
Total	532	2	25	12
Utilised Flake	11	-	-	-
Utilised Total	11	-	-	-
Scraper	1	-	-	-
Backed bladelet	13	-	-	-
Backed point	1	-	-	-
Backed flake	4	-	-	-
M.R.P.	1	-	-	-
Total	14	-	-	-
Grand Total	557	2	25	12

conclusions indicated by other lines of evidence, namely that the site was occupied by a small group of people for a short period.

During the excavation of square W2 56 it was discovered that the potsherds are not limited to the surface but are also embedded in the underlying matrix. Unit 1 is a very hard red soil. Unit 3 appears to be close to bedrock as it contains many loose pebbles and granite spalls. A few large MSA-type flakes were found in this lower deposit but in general it was quite sterile. Excavations were ceased at 0,7m from the surface. The excavated square contained 25 potsherds but no formal tools. In fact, the very low artefact numbers below Unit 1 suggest strongly that this could be a single-occupation site. A single white trade bead was recovered between Areas 3 and 4 on the edge of the pan (Fig. 18).

Area 4

Located on a slight rise overlooking a large calcrete deflation, this area appeared particularly promising because of its decorated potsherds and the relatively large number of ostrich eggshell beads (Fig. 21). The upper left side of the 84 square metres sampled was extensively disturbed by dune molerats while the lower right area appeared to be less disturbed. The granite bedrock protruded at several places above the soil surface.

Five square metres were excavated, as on two occasions an adjoining square had to be uncovered in order to expose a hearth (Figure 21). Excavations were commenced with b4 122 and bedrock, a thick layer of calcrete pebbles, was reached some 7 cm from the surface. A hearth extending from the wall of Unit 1 necessitated excavating a4 122 in order to collect charcoal sample. Some large potsherds eroding from a burrow entrance in e4 125 led to the excavation of this square. Here, bedrock was reached at 10 cm. Another portion of a hearth, this time in f4 123, led to the excavation of g4 123. The hearth, at 20 cm from the surface, contained enough charcoal for radiocarbon analysis and a date of 160$\pm$45 BP (Pta-4763) was obtained.

The stone artefact density, 17,4 per square metre, is higher than from any other area sampled. There are 33 formal tools but, while backed tools still predominate, there is

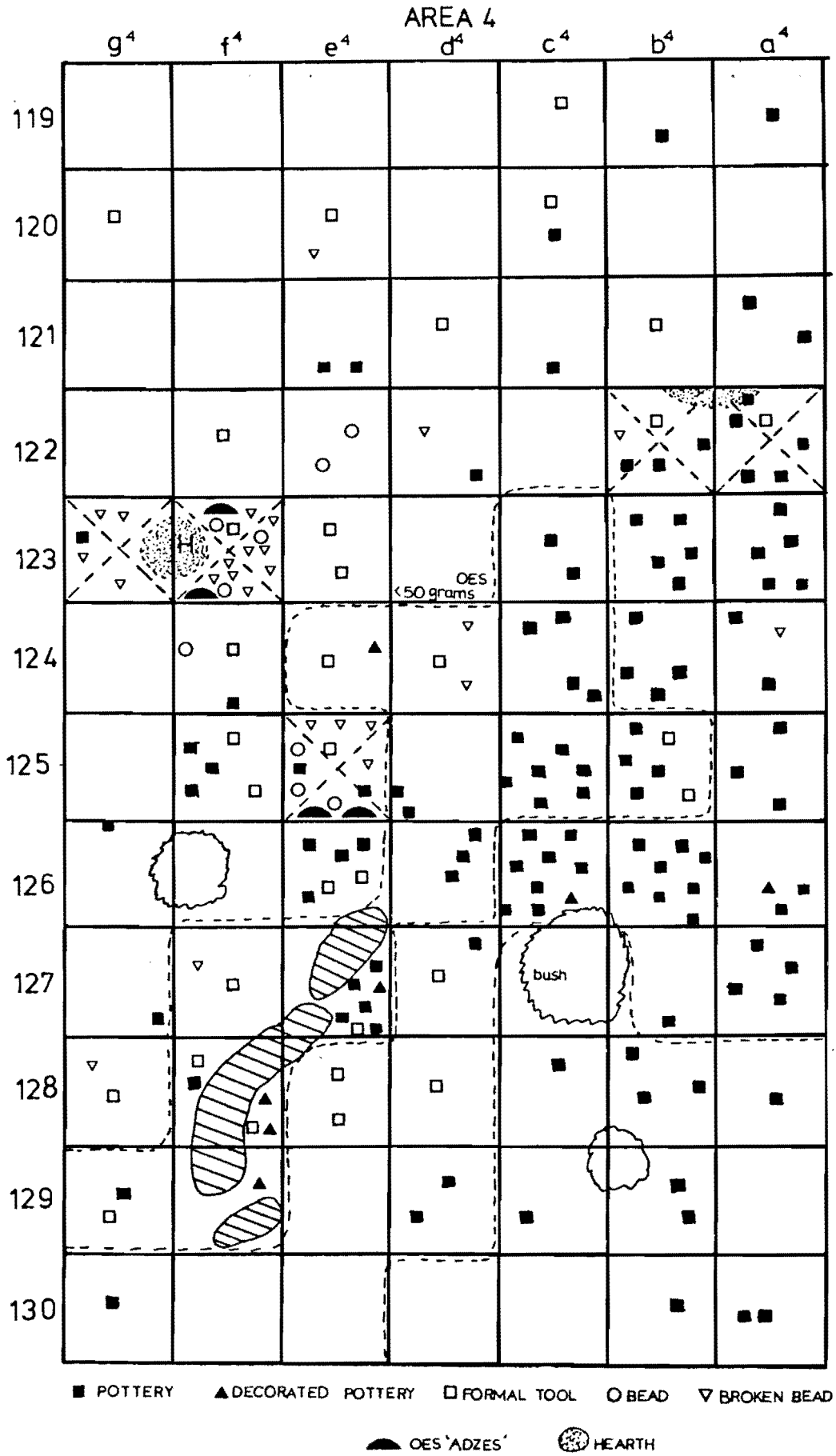

Fig. 21. Frummel Bakkies. Floor Plan of Area 4. The shaded areas indicate bedrock.

an increase in scraper and MRP numbers (Table 20) and the first appearance of adzes. The width/length ratio of the small scraper sample varies around a mean of 122. Quartz amounts to 46% of the waste category while quarzite artefacts contribute 22%. In the formal tool category quartz and chalcedony artefacts are almost equal in number.

The formal tools from the excavated units consisted mainly of segmented backed bladelets and backed flakes although scrapers and segments were also present. The scrapers were measured and the width:length ratios show that, like the other scrapers found at Frummel Bakkies, they are wide rather than long. Quartz artefacts amount to approximately 50% of the waste categories and quartzite continues to contribute at least 22% of the artefacts as in the surface unit. The formal tools from the excavated units are primarily on quartz.

The surface deposits produced 184 potsherds, considerably less than Area 3, but with at least ten decorated fragments and one lug. The rims exhibit a variety of forms from round to bevelled and tapered. The majority of the potsherds are black or brown, only a few exhibiting a red slip. Potsherd temper is predominantly grit although a few also contained grass. The mean thickness is 5,6 mm. Decorated sherds are illustrated in Figure 22 and discussed in greater detail in chapter 7.

The largest number of both finished and unfinished ostrich eggshell beads was recovered from Area 4. Yates, in an attempt to characterise the nature of the site, combined the beads from all five areas to obtain a mean diameter. However, careful examination of each area clearly shows that at least two samples are completely dissimilar. Area 3, for example, contained one unfinished bead, while Area 4 yielded six complete beads, five broken beads and twenty-three unfinished beads. There is obvious evidence for bead manufacture on site, indicating a rather more extended occupation of the site than Area 3. There are three very large beads in the sample, i.e., between 11 and 13 mm in diameter.

In addition to the beads and fragments, four worked ostrich eggshell pieces pieces were recovered from this area. They are triangular in shape and one of the interior margins

Table 20. Frummel Bakkies: Lithic artefact inventory Area 4 (84 m)

	Surface	Unit 1	Unit 2	Unit 3	Unit 4
Chips	421	83	92	60	12
Chunks	102	21	22	12	3
Flakes	729	159	241	73	28
Cores	98	32	43	8	2
Bladelet Cores	3	-	-	-	-
Bladelets	28	6	14	2	1
P. esquillées	8	-	-	-	-
Lithic manuports	11	2	-	-	-
Haematite	13	-	-	-	-
Waste Total	1413	303	412	155	46
Utilised flakes	18	1	-	-	-
Utilised blades	2	-	-	-	-
Utilised Total	20	1	-	-	-
Scraper	5	-	3	-	-
Segment	1	-	2	-	-
Backed blade	18	4	4	6	-
Backed flake	3	2	6	2	-
M.R.P.	4	-	-	-	-
Adze	2	-	-	-	-
Formal Total	33	6	15	8	-
Grand Total	1466	310	427	163	46

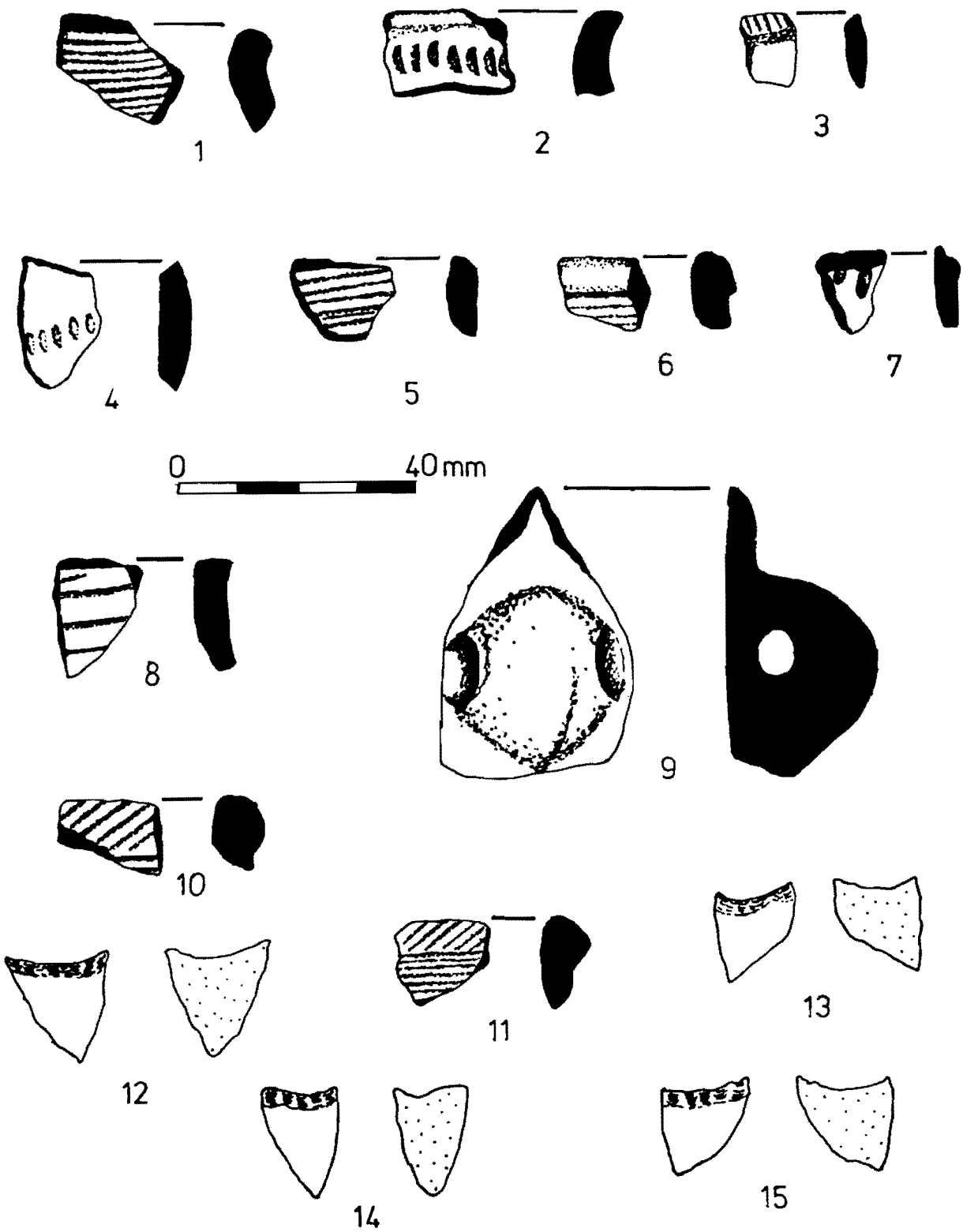

Fig. 22. Frummel Bakkies. Diagnostic pottery and ostrich eggshell 'scrapers': 1 = e4 124; 2 = e4 127; 3 = c4 126; 4 = f4 128; 5 = f4 128; 6 = e4 126; 7 = f4 129; 8 = g4 123 Unit 1; 9 = f4 123 Unit 2; 10 = e4 125 Unit 2; 11 = f4 123 Unit 3; 12 = f4 123 Unit 2; 13 = e4 125 Unit 2; 14 = f4 123 Hearth in Unit 3; 15 = e4 125 Unit 2.

of each piece has been shaped to form a concave edge (Figure 22). It would appear that these fragments served some utilitarian function.

Area 5

This area was selected because of the unusual arrangement of stones which, on the basis of ethnographic analogy, I interpreted as the remains of a stockpost. Three features, a hut floor, a 'kookskerm' and an ash heap could be identified in what appeared to be the correct spatial arrangement (Figure 23).The rough stone circle, some 3 m in diameter, is located on a very flat, hard calcrete surface. The artefact scatter of stone and ostrich eggshell is thin on the inside but more dense on the outside. The second stone feature and the ash heap contained more metal and glass items. Excavation therefore proceeded with a view to testing the hypothesis that the three features were associated and represented a stockpost. In view of my ethnographic work in Leliefontein this hypothesis could be tested by:

(a) locating postholes slightly inside the stone circle,

(b) finding the hut entrance on the east-facing side of the circle,

(c) finding evidence of a hearth within the second stone feature identified as the 'kookskerm'

(d) finding items in the ash heap which could be linked to those recovered from the hut and 'kookskerm'.

All the calcrete, quartzite and granite boulders were mapped and a surface collection made from 48 square metres. Excavations were then undertaken in the proximity of the stones in order to locate possible postholes. Although a number of depressions were excavated in the soft soil, they do not appear to be regularly spaced and of a similar size. These depressions could not be distinguished from burrows or hollows caused by roots. The hard, compacted calcrete soil occurred both inside and outside the stone circle and could not be interpreted as a hut floor. The soil beneath this hard surface is quite sterile. Several square metres were excavated on the east-facing circumference of the circle but no evidence of a well-trodden hut entrance could be traced. Although stone artefact densities (Table 21) do increase outside the circle, the artefacts do not appear to have been deposited in a certain relation to the stones. They appeared, rather, to form part of a larger distribution scatter lying on the calcrete surface and

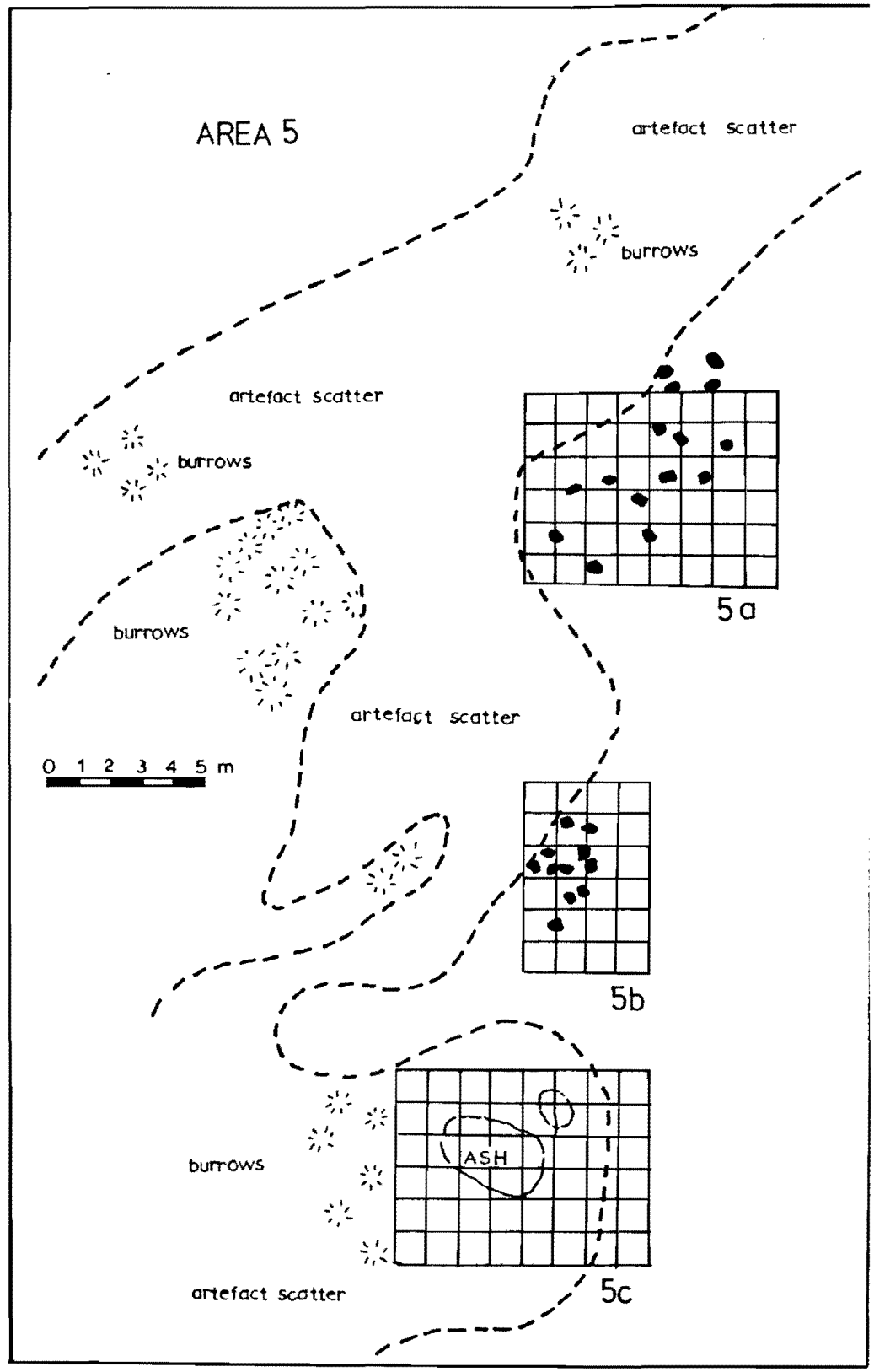

Fig. 23. Frummel Bakkies. Area 5 stone circle and ash heap.

Table 21. Frummel Bakkies: Lithic inventory from Stone Circle Area 5 A.

	Unit 1	Unit 2	Unit 3
Chips	48	16	9
Chunks	10	2	-
Flakes	81	24	14
Cores	7	10	-
Bladelets	2	1	-
Lithic Manuport	7	-	-
Waste Total	155	53	23
Utilised Total	-	-	-
Segments	2	-	-
Backed bladelets	-	1	-
Backed points	1	-	-
Backed flake	1	1	-
Adze	1	-	-
Formal Total	5	2	-
Grand Total	160	55	23

concentrated toward the south (Figure 23). Nine square metres were sampled and very low artefact numbers obtained from the lowest units.

The second stone feature, the 'kookskerm' was also investigated. A hearth was found immediately below the surface. It was only a few centimetres thick and a mere scatter of charcoal and ash. Fragments of glass from the hearth clearly indicate it to be of recent origin. Large numbers of metal fragments around the stones also suggest that the feature itself may be fairly recent. Small numbers of stone waste artefacts were recovered from the excavation of two square metres.

Although designated 'ash heap' in my field books, I am uncertain as to the real nature of this feature. It is a dense concentration of both recent artefacts (i.e., glass, metal and china) and prehistoric ones (potsherds, stone and ostrich eggshell). Several fragments of bone were recovered from a thick ash and charcoal concentration in the centre of the 48 square metres sampled. The excavation of two squares confirmed that a considerable amount of ash had been dumped in this area. Sterile brown gravel was reached only in Unit 3 and it appears from this excavation that a recent ash accumulation was dumped on top of a pre-colonial occupation. It is impossible to separate these two (or more) units as they appear to have been subjected to considerable mixing. A surface collection from 36 square metres produced an artefact density of 8,8 per square metre. A lower grindstone was recovered and at least half of the formal tool total of 12 consisted of artefacts that were not backed (Table 22). A total of seven scrapers from Area 5 was measured, and although there is a tendency for them to be wide, a few are almost square (as opposed to circular) in plan form. The width/length ratio of the small scraper sample amounts to a mean of 121. Quartz amounts to less than 50% of the waste category and silcrete and chalcedony appear to be the preferred raw material for formal tools. The majority of the 40 potsherds from the surface sample are brown and grit-tempered although a few contain grass temper. Sherd thickness averaged 6,6 mm and no rims or decorated fragments were recovered although one nippled base and one lug were found. Five complete, one broken and one unfinished ostrich eggshell beads were recovered from the three areas sampled in Area 5, which exhibited a wide range in exterior diameters. Several fragments of marine shell, in all likelihood those of limpets, were found in the ash heap area. In addition, a blue trade bead was recovered

Table 22. Frummel Bakkies: Lithic inventory from Ash Heap Area 5 C.

	Surface	Unit 1	Unit 2	Unit 3
Chips	112	13	13	7
Chunks	19	5	9	3
Flakes	149	21	42	5
Cores	17	3	5	-
Bladelets	3	3	-	-
P. esquillées	1	-	-	-
Lithic Manuport	3	1	1	-
Waste Total	304	46	70	15
Hammerstone	-	1	-	-
Utilised flake	3	-	-	-
Utilised Total	3	1	-	-
Scraper	3	3	1	-
Backed bladelets	4	-	1	-
Backed flake	2	-	1	-
M.R.P.	2	-	-	-
Adze	1	-	-	-
Formal Total	12	3	3	-
Grand Total	320	49	74	15

from just outside the stone circle. A surface collection of decorated sherds is illustrated in Figure 24.

In conclusion the hypothesis proposed, i.e., that the three features were associated and represented the remains of a stockpost, could not be proved. Nevertheless, there is abundant evidence for both recent and prehistoric occupation of the site; but associating certain artefacts with the stone features, appears to be an impossible task. Areas 1 and 2 are difficult to characterise, but Areas 3 and 4 are quite clearly different from each other and offer the possibility of identifying different cultural expressions on the landscape. These sites are discussed in the following chapter.

OBSERVATIONS ON ARCHAEOLOGICAL SITES IN WESTERN BUSHMANLAND.

In addition to the investigations of Beaumont and Vogel (1984), the author also visited several of the sites discussed below (Fig.2).
Suurwater: Beaumont (Beaumont & Vogel 1984) located a sparse spread of ostrich eggshell pieces, potsherds and 'Later Stone Age' artefacts on a dune crest less than a kilometre east of the Middelrug farmhouse. The ostrich eggshell fragments produced a date of 1110±45 BP (Pta-3357).

Maan se pan: a 'klipbak', or hollow in the Namaqualand grey gneiss in which water collects after summer rains, is situated about one kilometre to the north of the pan. There are at least ten shallow grinding grooves in this rock and a dense surface scatter of ostrich eggshell fragments nearby. Among the OES we found two scrapers and both grass and grit-tempered potsherds, including one sherd with a boss.

Leeuklip is the name of a large rocky knoll visible for many miles. There are many 'klipbakke' on top of the knoll, many still containing water in July when I visited the area. There is a small rock shelter immediately above the farmhouse on the slope of the knoll. Beaumont (pers. comm.) excavated the shelter in order to "obtain a minimum age for the schematic ladder paintings " on the cave walls. The surface spit of his uncompleted test pit comprises a compact grey ash; it produced a date on ostrich

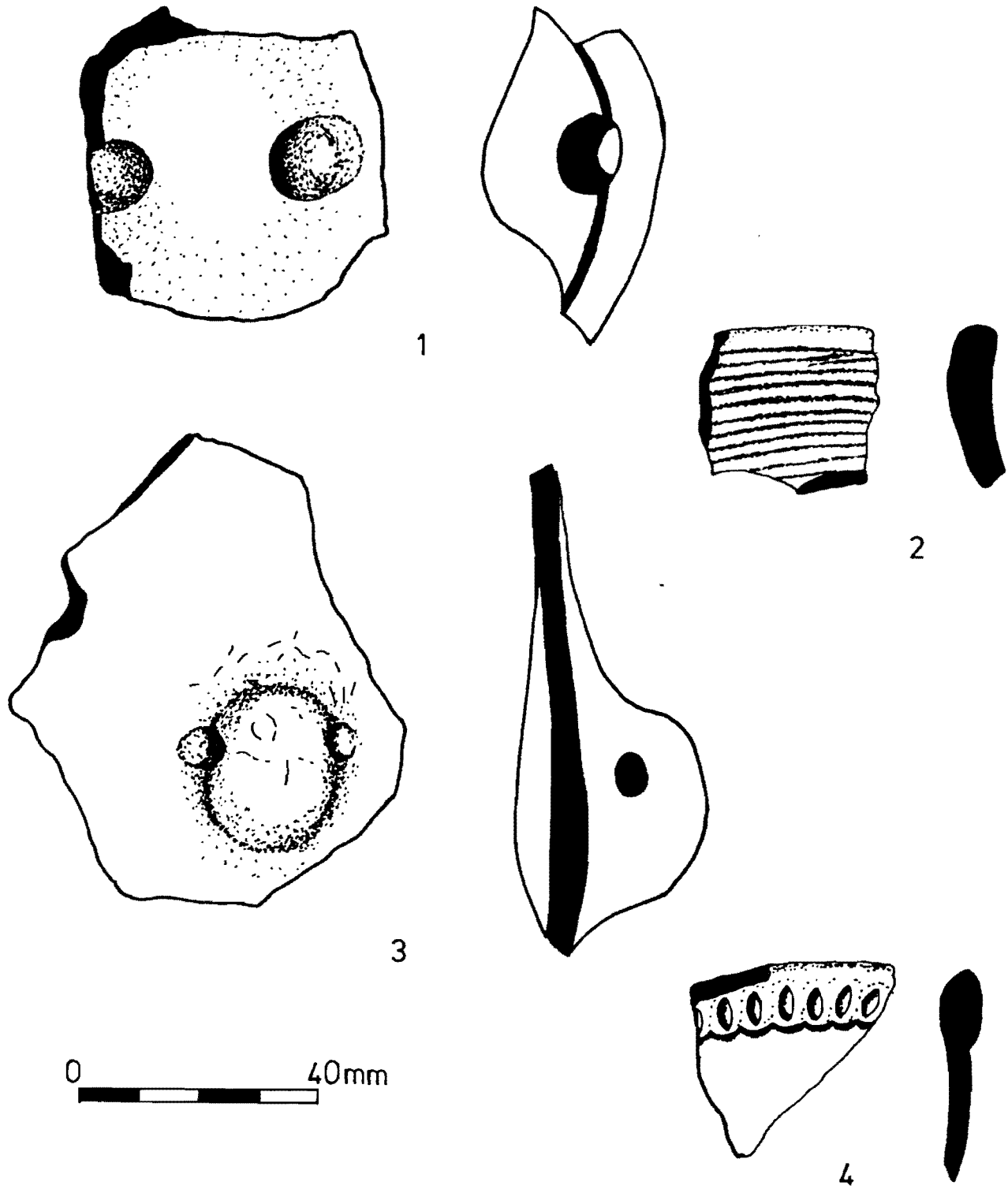

Fig. 24. Frummel Bakkies surface pottery collection: 1 = K2 81; 2 = H2 51; 3 = J'22; 4 = Area 6.

eggshell pieces of 300±50 (Pta 4278). We saw pottery, bone, fine-grained stone artefacts and ostrich eggshell beads on the shelter surface and on the talus slope below. Outside the shelter is a flat rock with numerous grinding hollows.

Bitterputs is the location of the 'skep putse' (hand dug wells) referred to by my informants from the Leliefontein reserve. Numerous stone-lined wells were apparently dug by Baster peoples at around the turn of the century. The brack water is led into troughs so that livestock may be watered. Access to Bitterputs today is prohibited because of diamond mining. Beaumont was able to sample a scatter of ostrich eggshell pieces adjacent to a cluster of granite boulders situated near the pan edge and not far from the Bitterputs-Bosluispan track. The ostrich eggshell, associated with Later Stone Age artefacts and pottery yielded a date of 490±40 BP (Pta-3359).

Varskaip, situated just south of Bosluispan, is another example of a 'klipbak'. There are at least twenty shallow grinding grooves on the granite rock around the hollow. Next to the rock are numerous artefacts, mainly fine-grained scrapers, a segment and an adze, as well as a few potsherds.

Leeuvlei: the owner of this farm found a cache of 13 ostrich eggs on the edge of the pan, as well as numerous upper grindstones, and two grooved stones with grooves of different diameters. That with the smaller diameter was possibly used for making ostrich eggshell beads. We found a dense artefact scatter along the northern edge of the pan. Once again, there were many ostrich eggshell fragments, including some beads and a decorated fragment, many Later Stone Age artefacts (scrapers, adzes, backed pieces, bladelet cores), but relatively few potsherds.

Norabees vlei is yet another granite basin with hollows containing water after summer rains. Around the deepest hollows are a few shallow, oval grinding grooves. A thin scatter of stone artefacts (mainly quartz flakes and a few retouched pieces of chalcedony and silcrete), some potsherds and ostrich eggshell pieces were seen.

Goubees is called 'the Basters' place. The large vlei is surrounded by corrugated iron shacks and the inhabitants have obviously been digging in the gravel soil around the pan

in search of water, thereby disturbing the archaeological deposits and making further investigations problematic.

Kangnas consists of a small cave and a rock shelter roughly opposite one another in a small valley. The cave contains some black geometric paintings and a few handprints. There are numerous grinding hollows in the granite bedrock. The back of the cave appears to have been used as a lair but the front contains a very shallow, ashy deposit with stone artefacts, bone, ostrich eggshell pieces and beads. There are numerous retouched black glass artefacts on the talus slope outside the cave. Oral record has it that an old 'bushman' used to live in the cave and the present farm owners claim that their grandfather used to bring him skins to prepare.

Steenbokvlei is just south of Kangnas and appears to be linked to it as it also contains numerous glass flakes with retouch. Once again, the pan contains large flat granite hollows, 'klipbakke', and grinding grooves. The site contains large numbers of chalcedony artefacts and ostrich eggshell pieces.

Beaumont (pers. comm.) has observed that these ceramic LSA pan sites have high densities of ostrich eggshell, few potsherds and a predominance of backed pieces. The sites on the western margins of Bushmanland have a higher incidence of scrapers and segments than those on the eastern edge. A phenomenon of the pans in western Bushmanland is the oval ground grooves on granite surfaces near water. No comparable occurrences have been found further east.

THE RICHTERSVELD

This region, which lies within the great bend of the lower Orange River, is considered separately because it is both topographically and climatically quite different from the central Namaqualand described above. The northern, eastern and central sections of the Richtersveld consist of rugged mountain ranges and deep kloofs, many areas being inaccessible except on foot. The western section of the reserve comprises a hilly dune landscape known as the Sandveld. This area is situated between 150 and 400 m above sea level while the mountainous section ranges from 400 to 1300 m above sea level.

The soils of the Sandveld are deep and red and do not retain moisture after rains. Insoluble salts are often deposited on the soil surface, which has a negative effect on the vegetation. The soils of the mountain have a lower salt content and they are also very shallow with the result that rain run-off may lead to sheet erosion. The shallow soils mean that the vegetation reacts more rapidly to rain than in the Sandveld (Kröhne & Steyn 1990).

Areas within the reserve experience desert conditions and are characterised by dry summers and extremely low rainfall in winter. The cold Benguela current has a moderating influence on the temperature of the western Sandveld which varies between 12-17 degrees C; however, extreme ranges in temperature are experienced in the mountains to the east. Summer temperatures of up to 46 degrees C have been recorded in the eastern parts of the reserve, which falls within a rainshadow. The rainfall in the Sandveld varies between 50 to 150 mm per annum, while the high mountains (receiving between 150-300 mm per annum) create a rain barrier so that the Springbokvlakte receives very little. Summer thunderstorms are an infrequent phenomenon in these desert areas. Frequent mist, which often only clears by midday, is an important supplementary source of moisture for the plants. Droughts are a common feature of the landscape and result in great stock losses. The Richtersveld is drained by a number of streams but only the Holgat River flows into the sea after heavy rains. The Orange River is, of course, of vital significance to all the inhabitants of the northern Cape as it is the only permanent source of water.

The vegetation along the river and around the permanent springs consists of a thick band of trees. The vegetation on the coastal plain is Strandveld dominated by Mesembryanthemaceae. Succulent Karoo occurs on the more hilly and stony eastern edge of the Strandveld area. Namaqualand Broken Veld is found to the east of the central Stinkfontein mountain range, in the northern and eastern parts of the Richtersveld. The highest reaches of the mountainous southern and central Richtersveld are covered in Western Mountain Karoo vegetation. They are more densely vegetated than other areas and are regarded by many as the best grazing during the dry summer months (Archer in prep.).

/Ai tomas (Vaalhoek)

This site (28 35'S;17 05'E) is 50 km east of the Atlantic Ocean and about 15 km south-east of Khubus, the largest village in the Richtersveld Communal Reserve (Fig.2). It comprises two large clusters of boulders some 100 m apart at one end of a large valley. A dense scatter of pottery and stone artefacts around one group of boulders suggested the potential for archaeological excavations. A fresh spring approximately 100 m to the west of the boulders, while requiring regular maintenance, provided sufficient water to support a team of four researchers for two weeks during the summer months. Contemporary herders make seasonal use of the locale around /Ai tomas and the presence of an abandoned "kookskerm" and several old ash heaps testify further to recent occupation of the site. There is considerable evidence for prehistoric settlement to the east of the first set of boulders. A large scatter of stone artefacts and pottery (Fig.25) suggests that this was a popular spot for settlement in the past. To the west of the second set of boulders and next to the spring, there is a thick crust-like deposit which appears to be dung, which would appear to be the remains of a kraal dating to the present decade, although potsherds are also scattered here.

Surface Collection

A surface collection was made to the east of the boulders in the area indicated in Figure 25. Material was collected in squares of 2 x 2 m, amounting to 32 square metres in total. The stone artefact numbers are disproportionately high for a single occupation and would seem to imply repeated occupation of this particular area in the past. The 'kookskerm' nearby confirms that it is still a desirable settlement area for contemporary herders. Despite a lack of temporal control, the sample can nevertheless be indirectly dated by comparing the artefacts with those obtained from the chronological sequence established at the site. There are very few backed pieces in the surface formal tool assemblage but the large number of scrapers (Table 23) would appear to tie in with the middle units of the deposit in Area 3. The large sample of scrapers was measured and yielded a mean width/length ratio of 124, i.e., approaching a circular form. Since no *//khom* (rough sandstone scrapers) stones were found on the surface, a recent date is unlikely and the evidence points to approximately 400 BP. One unusual find is a broken bored stone. These are fairly uncommon in Namaqualand, compared with, for example,

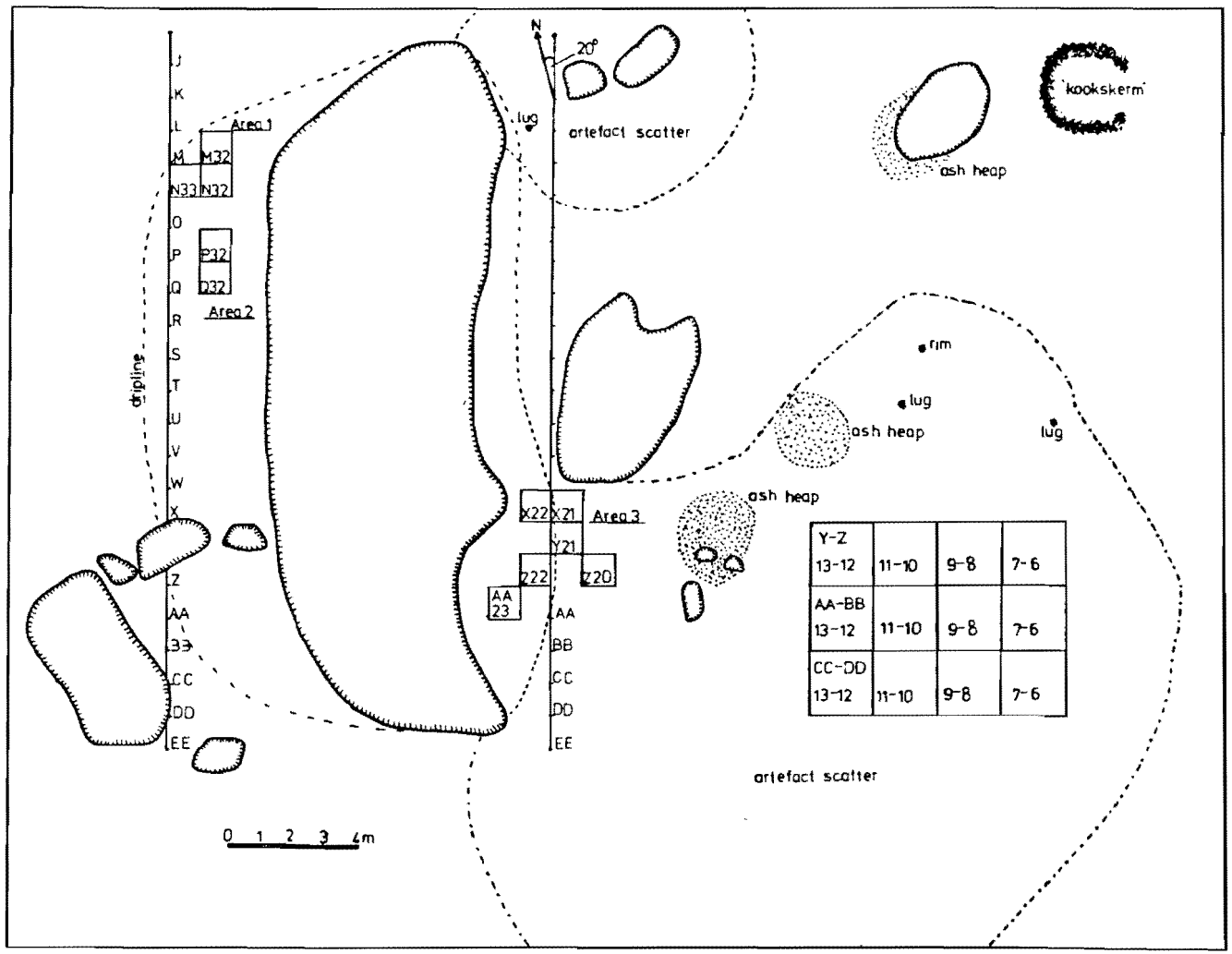

Fig. 25. /Ai tomas site plan showing the location of the excavation in Areas 1, 2 and 3 and the surface collection made to the east of the boulders. Remnants of old stockposts are also visible on this plan.

Table 23. /Ai tomas: Surface lithic collection.

	Y-Z 13+12	Y-Z 11+10	Y-Z 9+8	AA-BB 9+8	AA-BB 11+10	AA+BB 12+13	CC-DD 13+12	CC-DD 11+10	CC-DD 9+8	CC-DD 7-6
Chips	166	421	92	63	443	678	296	601	721	160
Chunks	59	204	123	35	208	74	81	152	160	94
Flakes	165	524	339	148	453	224	284	357	413	216
Cores	105	183	138	62	175	82	148	108	163	93
P.esquillées	-	2	2	-	-	1	1	5	-	2
Specularite	-	-	-	1	1	1	-	6	5	-
Quartz crystal	-	2	2	-	7	4	-	4	2 other	-
Total Waste	495	1336	696	309	1287	1064	810	1233	1465	565
Utilised flakes	14	18	20	1	19	7	31	15	13	41
Grindstone pieces	-	2	2	-	1	-	-	-	-	-
Bored stone	-	-	1	-	-	-	-	-	-	-
Total Utilised	495	20	23	1	20	7	31	15	13	42
Scrapers	4	9	4	-	5	5	3	10	13	4
Backed pieces	1	1	3	-	1	-	-	1	4	2
Adzes	-	2	-	-	2	1	-	-	-	-
MRPs	2	6	5	1	9	1	2	3	3	5
Borer	-	1	-	-	-	-	1	-	-	-
Total Formal	7	19	12	-	17	7	6	14	20	11
Grand Total	516	1375	731	311	1324	1078	847	1262	1498	618
Pottery	27	39	53	17	58	8	39	32	38	23
OES Beads	7	-	-	1	2	3	5	1	-	-
Shell pieces	1	-	-	-	1	-	2	1	2	-
OES pieces	18	16	1	12	-	42	58	42	33	3

the western Cape. The nine decorated potsherds all have oval impressions, and other diagnostic elements include three internally reinforced lugs. The potsherds all contain a grit temper and resemble the rest of the excavated samples in decoration and thickness. A few complete and unfinished ostrich eggshell beads were recovered, with external diameters ranging from 3,4 mm to 7,5 mm. A few fragments of specularite as well as marine shell fragments (mainly Patella), were found in some areas. Although the sample size may be rather small for spatial analysis, the distribution map would appear to indicate an inverse relationship between scrapers and beads. Specularite also seems to occur in those areas with the highest scraper numbers.

Excavation

Excavations commenced to the west of the boulders (Fig.25) as we erroneously believed that the size of the rock overhang on this side would provide welcome shelter from the summer heat. It was soon apparent, however, that a combination of early morning shade and strong, gusting winds made this a particularly cold and unpleasant spot. We excavated three square metres to the north-west (Area 1) of the boulder. The deposit was not particularly rich and a further two squares metres were excavated to the south-west (Area 2), so as to confirm that we were correct in shifting our attention to the east of the boulders. Well-preserved plant remains from these two squares provide a valuable time depth to the ethnobotanical research currently under way in the Richtersveld, as well as information on diet and season of occupation. Our excavations were concentrated in a small shelter on the eastern side of the boulder (Area 3). This side receives early-morning sun but it does not get unbearably hot until 11 am., when the small overhang provides shade for the rest of the day. Six squares metres were excavated in this area.

Stratigraphy

The stratigraphy of each area is discussed separately. Radiocarbon dates have shown that the age of the top 5 cm in Area 1 is of the same order as that of the the top 20 cm from Area 2. The upper units of Area 3 are undated because of contamination of the radiocarbon sample, while the date from lower in Area 3 is considerably older than the other two dates, making comparisons difficult. However, I shall show in the discussion that these different areas may be linked and compared on the basis of their artefacts.

Area 1: There are very few intrusive, modern items in the upper units of the deposit. The occasional glass fragment was recovered from the top 5 cm but there are no trade beads or other items which would suggest early colonial contact. The stratigraphy of these three squares consisted of a number of layers of brown soil, ash and hearths. Charcoal from N33 Layer BL at a depth of 5 cm (associated with stone artefacts, pottery and bone) was dated to 420±50 BP (Pta-5458) with a calibrated date of AD 1474. In Tables 24 and 30 this unit is grouped under the heading GBS. Square N33 contained a pit with what appeared to be the complete skeleton of a adult klipspringer as well as the remains of a juvenile klipspringer. We stopped excavations in N33 at 32 cm when the soil became quite hard and sterile. Bedrock was reached in places in M32 at depths of between 20 cm and 28 cm.

Area 2: The eastern half of squares Q32 and P32 contained a series of soft, gritty layers rich in organic remains and charcoal. Samples of both were collected. The western half of these squares contained a number of compacted, fine ash layers. They appeared to be relatively sterile. The fact that the plant remains showed no signs of burning suggested that the ash was not in primary context but had been dumped; i.e., it was possibly an ash heap. We stopped excavation in those squares when we reached a gritty, sterile horizon. Charcoal from P32 Layer SLS2 at 16 cm depth (associated with plant food remains) was dated to 330±45 BP (Pta-5452). In Tables 25 and 31 this unit is listed under SLV.

Area 3: The overhang on this side of the boulder extends over 5 metres, providing both shade and shelter. Very few clear stratigraphic lenses or units could be identified here. Although the excavators remarked on changes in the texture of the soil (more gritty or more powdery), there were few visible changes in soil colour, hence stratigraphic profiles from /Ai tomas are not included. The soil was predominantly of a light brown colour and fairly gritty. Hearths and pits were, however, identified and excavated separately. Excavations in general proceeded in 5 cm spits to a depth of 30 cm.

Preservation of charcoal and organic remains on this side of the boulder is particularly poor. Square Z20, which is most exposed to the elements, also had root and termite disturbance. Excavations were stopped at unit HAG2 when the soil became very sterile.

The soil toward the back wall of the shelter (as in square AA23) was considerably softer. Pits are a feature of the deposit, at least five pits being uncovered. The pit in Y21 LBS4 was particularly rich in bone as well as containing an upper grindstone and a piece of ochre. Charcoal from a hearth in Y21 Unit 2 at 7 cm depth was dated to AD 1957/8, i.e., the sample had clearly been contaminated as it was not associated with any modern intrusive material. I would expect it to date in the 300-400 BP year range. A charred bone sample, taken from a depth of 18 cm in square Y21 LBS3, was submitted for dating because of the poor preservation of charcoal in the lower units. A date of 1980±120 BP (Pta-5530), with a most probable calibrated age of AD 64 (Vogel pers. comm.), was obtained. In Tables 26 and 32 LBS3 falls within the grouping L4S.

Cultural Remains

Stone artefacts: in general, the assemblage is of a microlithic nature and is characterised by a small formal tool component. In Area 1 this varies between 1,3% and 2% of the total assemblage (Table 24.1). Formal tool frequencies peak in GRO and RO close to the base of the excavation. In Area 2 formal tools amount to less than 1,5% (Table 25.1). The formal tool component in Area 3 varies considerably between stratigraphic layers and reaches 2,8 % in some units (Table 26.1). The lithic artefact concentration (number of artefacts divided by the number of buckets of excavated deposit) clearly shows there to be two peaks in formal tool distribution, one during the period of most intensive occupation (around U2S, L3S and LHS) and another peak at the base of the excavated deposit (L4P). Formal tool numbers on the other hand, peak in L4S which has the lowest lithic concentration. Formal tools comprise scrapers, backed pieces and miscellaneous retouch. There are a few, non-standard shaped adzes and their identification may be debated.

Scrapers numbers tend to remain constant through the sequence in all three areas. Width/length ratios were calculated but, because of the small sample sizes in each area, the results should be applied with caution. The width/length ratio of scrapers from unit L4S and U2S varies around a mean of 124 although L3S, located between the two, has a mean width/length ration of 137. Scrapers are manufactured on quartz, silcrete and chalcedony. MRPs are second in frequency to scrapers and they are generally also

Table 24. 1. /Ai tomas: Lithic artefact inventory Area 1.

	SUR	GBS	CCG	GGW	GRO	RO	RR	TOTAL
Chips	219	213	165	207	245	259	86	
Chunks	28	59	36	35	41	37	24	
Flakes	102	147	114	138	156	177	69	
Bladelets	1			3	1			
Cores	66	65	42	32	51	39	21	
Pièce esq.	1	1			1			
Specularite		5	2		3	1		
Other lithic			1	3	3	2		
Total	417	490	360	423	501	515	200	2911
Util. Flake	8	18	15	15	15	13	14	
Hammer/grind.					1			
Total	8	18	15	15	16	13	14	100
Scraper	2	4	3	2	3	4	2	
Adze			1			1	1	
Segment				1				
B. bladelet		1			1	1		
B. point					2			
B. flake		1				1		
Borer			1					
M.R.P.	7	4	3	3	2	3		
B. basal seg.				1				
Total	9	10	8	7	8	10	3	55
Grand total.	434	518	383	340	525	538	218	3065

Table 25. 1. /Ai tomas: Lithic artefact inventory Area 2.

	SUR	SBH	SLF	SLV	SL3	TOTAL
Chips	113	196	70	66	1	
Chunks	11	28	23	9	1	
Flakes	37	97	64	47	3	
Bladelets						
Cores	21	52	23	18	1	
Core rej. fl.		1				
Specularite	1	2	1			
Other lithic				3		
Total	183	376	181	143	6	889
Util. Flake	6	12	7	2	1	
Hammer/grind.						
Total	6	12	7	2	1	28
Scraper		1				
Adze						
Segment						
B. bladelet						
B. point	1	1				
B. flake		1				
Borer						
M.R.P.	2	2	1	1		
B. basal seg.						
Total	3	5	1	1		10
Grand total.	192	393	189	146	7	927

Table 26. 1. /Ai tomas: Lithic artefact inventory Area 3.

	SUR	UNG	U2S	L3S	LHS	L4S	L4P
buckets	12	22	26	21	23	21	6
Chips	95	438	1007	916	898	322	212
Chunks	102	189	414	244	217	110	73
Flakes	229	684	1329	923	930	568	291
Bladelets	2		6	24	9	1	5
Cores	70	161	261	135	132	72	20
Red. piece	3	10		5	7		1
Pièce esq.	1		8	7	5	1	
Rej. flake	1	1					
Specularite		22	29	16	29	9	4
Other lithic	2	4	14	14	19	8	6
//khom			1	4		2	
Total	505	1509	3069	2288	2246	1093	612
Util. Flake	20	22	48	29	29	15	1
Hammer/grind.		3	4	1	1	2	2
Total	20	25	52	30	30	17	3
Scraper	4	6	10	9	2	11	4
Adze	1		3		2		
Segment	1	2	3			1	
B. bladelet		2	6	4	4	3	1
B. point		2	3	3	1	4	
B. flake	3	3	4	7	3	3	
Borer		2		1	1		
M.R.P.	5	17	30	9	14	10	2
B. basal seg.			2		1	1	
Total	14	34	61	34	28	33	7
Grand total.	539	1568	3182	2352	2304	1142	622

made on silcretes or chalcedonies. Their function is probably similiar to that of scrapers although they are of a more informal design.

Backed pieces were examined using H.J. Deacon's (1976) and Leslie-Brooker's (1987) description for sub-types. Backed pieces showed a noticeable peak in the middle units of the deposit; i.e., in units 2,3 and LBS. Segmented and unsegmented backed bladelets as well as backed points are generally made on quartz. Very few segments, borers and awls were recovered. The low frequency of borers is noteworthy in view of the widespread evidence for the manufacture of ostrich eggshell beads on site. Adzes are generally smaller than the average Wilton adze and they tend not to conform to a rectangular plan. The flake scars are shallow and they more closely resemble heavily utilised flakes. J.N.F. Binneman examined one of these artefacts under a microscope and it clearly showed wood polish on one side and hide polish on the opposite side. According to Binneman (pers. comm.) "scraper-adzes" like this are also found in the eastern Cape.

Utilised flakes are the most common tool in the utilised category in all three areas. They are manufactured on quartz, silcrete or chalcedony. Utilised flakes vary from 2-6% in Area 1, to less than 3% in Area 2, and from 0,4% to 5% in Area 3. The ground stone artefacts from Area 3 includes a few smoothed, flaked granite pebbles as well as two quartzite upper grindstones with ochre staining (Fig 26) and one broken grooved stone probably used in the manufacture of ostrich eggshell beads.

Raw Material: The most significant aspect of the lithic assemblage is the wide range of raw materials. Some of these raw materials, according to a geologist (Dr D. Miller pers. comm.), had been collected from the Orange River. Quartz gradually assumes more importance in the /Ai tomas sequence, increasing from 60% in the lower units to 80% near the top in Area 1; the range in Area 2 is between 71% and 81%, while quartz decreases from 71% on the surface of Area 3 to 65% in the lowest unit (Table 24.2;25.2;26.2). At the same time, the frequencies of silcrete (around 20%) and chalcedony (around 10%) decrease from bottom to top. If one combines the silcrete and chalcedony figures then it is clear that Areas 1 and 3 compare favourably with each other while Area 2 contains considerably less fine-grained raw materials. Quartzite is

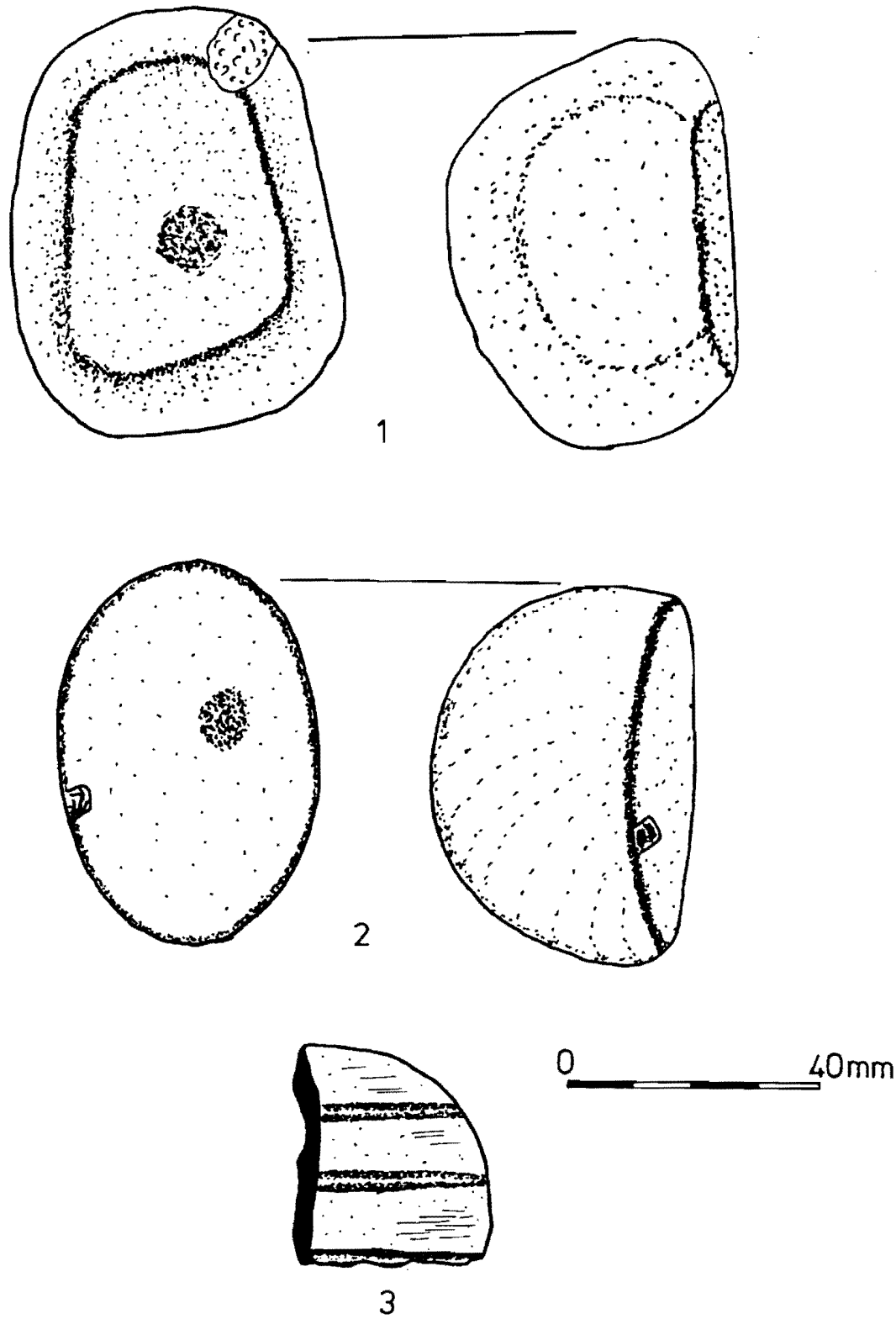

Fig. 26. /Ai tomas ground stone artefacts: 1 & 2 are quartzite upper grindstones from Y21 LBS4, both are ochre-stained. 3 = grooved, quartzite pebble from Y21 Unit 2.

Table 24. 2. /Ai tomas: Lithic artefact raw materials Area 1.

	SUR	GBS	CCG	GGW	GRO	RO	RR	TOTAL
Waste								
Quartz	344	383	261	295	318	316	121	
Sil.	54	78	75	101	131	148	65	
Chal.	9	14	16	24	40	43	10	
Qzte.	9	9	5	5	6	4	3	
Granite	1			1		1		
Specul.		5	2		3	1		
Hae/Mag.			1	2	3			
Shale/mica	1					2	1	
Other								
Total	417	490	360	428	501	515	200	2911
Utilised								
Quartz	1	3	4	4	5	4	5	
Sil.	3	9	6	4	5	5	4	
Chal.	4	6	5	7	5	4	5	
Qzte								
Granite					1			
Other							1	
Total	8	18	15	15	16	13	15	
Formal								
Quartz	2	5		2	4	2		
Sil.	3	1	3	1	2	6	3	
Chal.	4	4	5	4	2	2		
Qzte								
Shale								
Other								
Total	9	10	8	7	8	10	3	55
Grand total	434	518	383	450	525	538	218	3066

Table 25. 2. /Ai tomas: Lithic artefact raw materials Area 2.

	SUR	SBH	SLF	SLV	SL3	TOTAL
Waste						
Quartz	153	304	137	117	4	
Sil.	25	62	26	11	2	
Chal.	3	4	12	10		
Qzte.	1	3	2	4		
Granite						
Specul.	1	2	1			
Hae/Mag.						
Shale/mica						
Other		1	3	1		
Total	183	376	181	143	6	889
Utilised						
Quartz	1	8	4	1	1	
Sil.	1	2	2			
Chal.	4	2	1	1		
Qzte						
Granite						
Other						
Total	6	12	7	2	1	
Formal						
Quartz	3	3	1	1		
Sil.		2				
Chal.						
Qzte						
Shale						
Other						
Total	3	5	1	1	0	10
Grand total	192	393	189	146	7	927

Table 26. 2. /Ai tomas: Lithic artefact raw materials Area 3.

	SUR	UNG	U2S	L3S	LHS	L4S	L4P
Waste							
Quartz	362	1042	2072	1495	1405	716	403
Sil.	94	312	667	522	527	228	133
Chal.	29	84	214	181	222	99	61
Qzte.	15	39	65	48	41	28	4
Granite	2		4			2	
Specul.		22	29	16	30	9	4
Hae./Mag.	1	1	13	4	2	2	5
Shale/Mica		4	3	10	5	6	2
Other	2	4	2	11	14	3	
Total	505	1509	3069	2287	2246	1093	612
Utilised							
Quartz	6	5	12	5	9	4	1
Sil.	11	12	24	15	12	5	
Chal.	3	5	11	9	8	6	
Qzte.		2	3	1		2	
Granite		1	2		1	1	
Other	1						
Total	21	25	52	30	30	17	3
Formal							
Quartz	5	22	24	5	11	16	2
Sil.	8	7	23	19	15	11	3
Chal.	1	5	14	10	2	6	2
Qzte.							
Shale							
Total	14	34	61	34	28	33	7
Grand total	540	1568	3182	2352	2304	1143	622

generally present in small numbers (2%), while the peak in other raw materials (i.e., specularite, etc.) appears linked to similiar peaks in pottery, shell, ostrich eggshell beads and decorated pieces.

Specularite, haematite, shale, mica, sandstone, slate, agate and quartz crystals occur in the middle units of Area 3. The specularite pieces are generally small (less than 1 cm in size) and appear to have been ground down to this size. It is not known whether there are any sources of specularite in the Richtersveld but there is archaeological evidence for the mining of specularite at Blinkklipkop and Doornfontein in the northern Cape dating to at least 1200 BP and probably earlier as well (Humphreys & Thackeray 1983). Large pieces of sheet mica, obviously not weathered from the parent granite rock, were also recovered. Ground mica had been incorporated as temper in some of the potsherds. There are also a few pieces of rounded sandstone which appear to be *//khom* stones (Webley 1990). Unusual finds included a shale pencil or point. Two stone flakes from the surface unit were also coated in an unknown red pigment.

Pottery: The surface collection of decorated pottery is illustrated in Figure 27. A total of 557 potsherds were recovered from eleven square metres of excavation, 59 from Area 1, 75 from Area 2 and 423 from Area 3. There is a gradual increase in sherd numbers, peaking in units 2, 3 and LBS and then decreasing again close to the surface. There are no potsherds below GGW in Area 1 while numbers in Area 2 remain consistently high. The potsherd thickness ranges from 3 mm to 9 mm with a mean around 5,4 mm (Table 27). It conforms in most respects to Rudner's (1968) classification of Cape coastal ware as there are lugs and the decoration beneath the rims comprise either a single row of circular or oval impressions, and horizontal or diagonal lines (Fig.28). Sherd sizes are generally small and it is not possible to reconstruct the vessel shape. The temper is gritty and a small number of sherds contain ground mica. Very few sherds show a red or orange burnish, the majority having a rough black interior and exterior finish. One sherd contained a conical bored hole (Fig.28) which were reportedly made (Rudner 1968) to assist in mending the pot. Fibre, sinew or copper clamps could be inserted through the holes and the cracks covered with resin or wax.

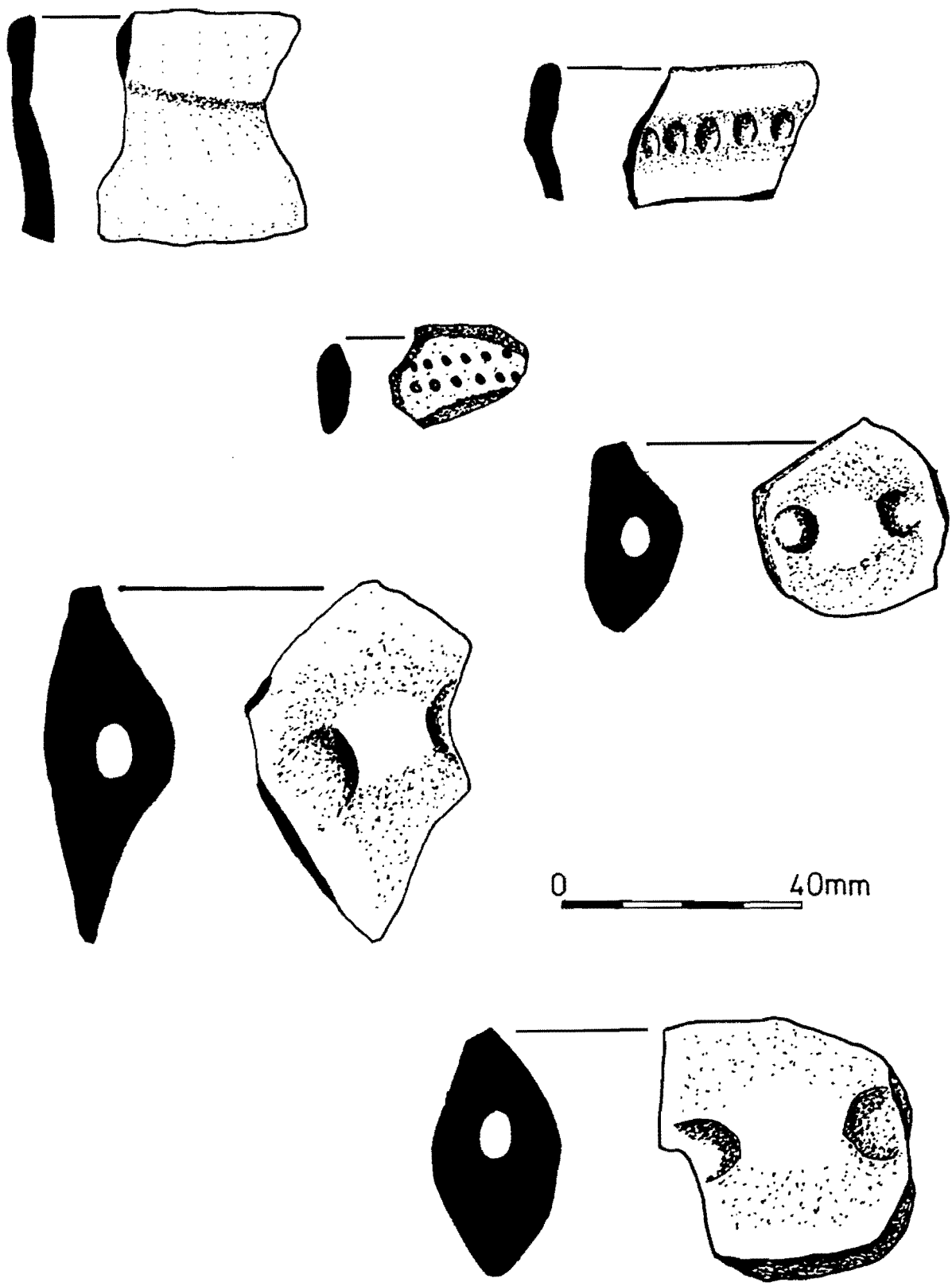

Fig. 27. /Ai tomas: diagnostic pottery from the surface to the east of the boulder.

Table 27. /Ai tomas: Pottery numbers and sherd thickness.

AREA 1	Number	Rims	Decoration	Lugs	Base	Thickness (mm)
Surface	20					5,8
GS/BL/SG	24		1			5,8
CH/CH1/GG	12	1				5,2
GG/GG2/WA	3					6,3
AREA 2						
Surface	7	2	1			5,8
SS/BP	27	1	2			5,4
SLS/FAS	14	1				5,5
SLS2/VGS	26	2				5,4
SLS3	1					6,7
AREA 3						
Surface	48	1	2			5,8
Unit 1	67	3	3			5,8
Unit 2	166	5	5	1		5,5
U3/LBS	82	6			1	5,4
LBS2/3	35	2			1	4,9
LBS3/4	11	2				5,0
LBS4	1					

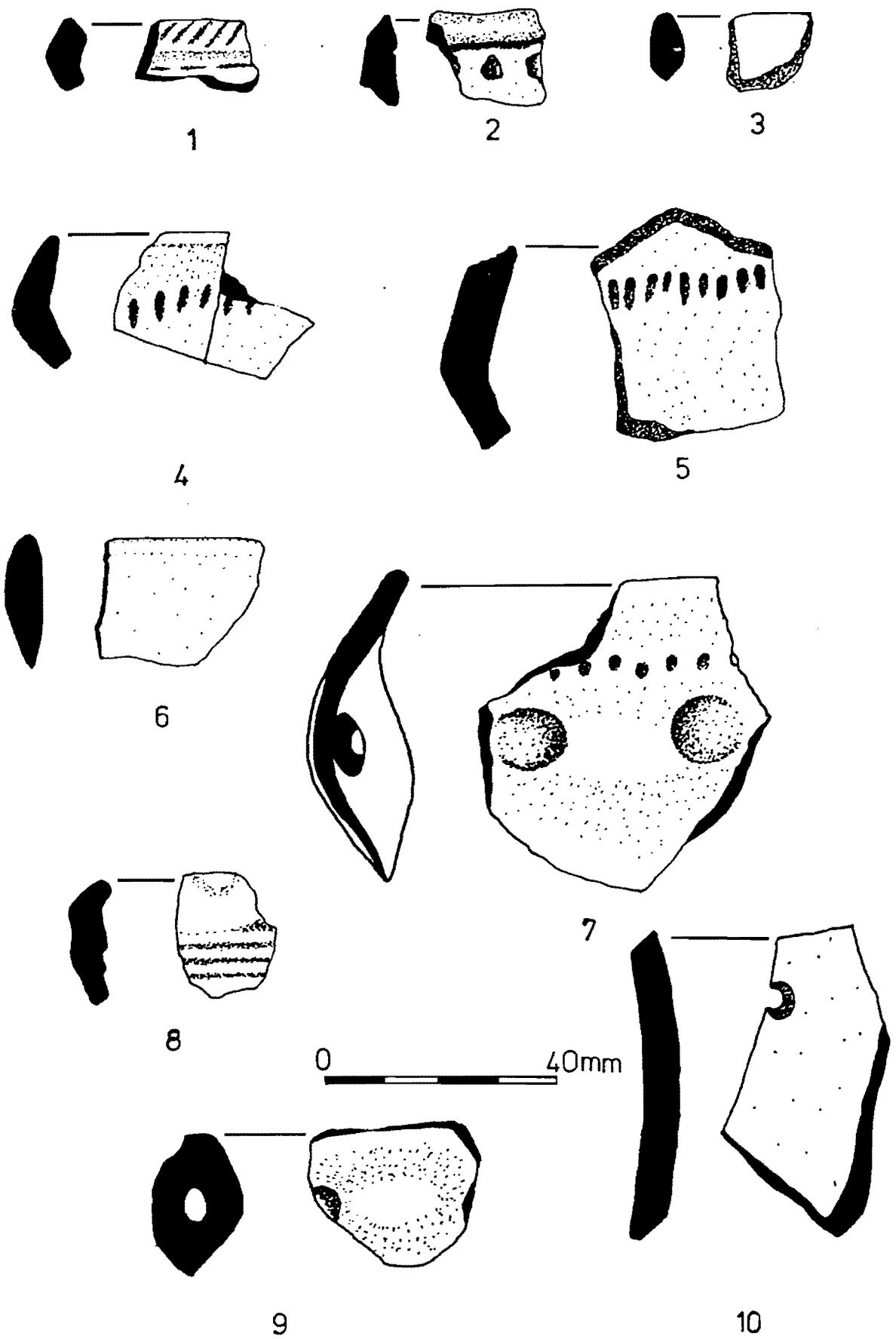

Fig. 28. /Ai tomas diagnostic excavated pottery: 1 = Y21 S; 2 = Q32 S; 3 = X22 Unit 1; 4 = P32 SS; 5 = Z22 S1; 6 = Z22 S1; 7 = AA23 SS; 8 = AA23 S1; 9 = Y21 Unit 3; 10 = X22 LBS.

Ostrich Eggshell fragments and decorated pieces: Fragments of ostrich eggshell (OES) were recovered throughout the deposit although they, too, showed a peak in units 2,3 and LBS (Table 28). Some of the fragments showed evidence of burning. One large piece was entirely coated with red ochre in the inside suggesting that OES flasks may have been used to store ground red ochre. A number of small fragments of decorated OES pieces were recovered from all three areas but was especially concentrated in Area 3 (Fig.30 and Table 28). Two flask mouths were also recovered. Decorated OES fragments do not occur at Spoeg River but a single piece was recovered from Bethelsklip and a few fragments were also identified at Frummel Bakkies. This may therefore be a significant cultural marker.

Ostrich Eggshell Beads: It is quite apparent from the number of unfinished beads recovered from all three area that bead manufacture took place on site (Table 28). Both methods of bead manufacture, as described by Jacobson (1987a) are represented. A broken grooved stone is further evidence of this activity (Fig 26).

Since diameter measurements had been taken by Yates on OES beads from Spoeg River and Frummel Bakkies in central Namaqualand and Bushmanland, all the deposit from /Ai tomas was sieved through a 1 mm mesh to recover all beads. The external diameter of complete as well as broken beads was measured (Table 28) and is discussed in the following chapter. /Ai tomas provides additional information regarding the present discussions around the trends in bead sizes during the last 2000 years. In Area 3 there is evidence for a gradual increase in mean bead diameters through the sequence from 4,2 mm in the lower units to 5,4 mm in the top units (excluding the surface). Several beads greater than 7,5 mm in maximum diameter appear in the upper units (Table 28). These larger beads start appearing in those units with larger sheep/goat samples and a peak in potsherd numbers. The date of 1980$\pm$120 BP is from a unit in Area 3 with no beads of 7,5 mm in diameter. A single large bead was found in the unit immediately above it. This is clear evidence that large beads post-date the first appearance of pottery, thus supporting Jacobson's (1987a) view, namely that Type 11 beads are associated with LSA assemblages post-dating the arrival of herding. However, an examination of the range of bead size diameters reveals that U2S in Area 3 (which has

Table 28. /Ai tomas: Ostrich eggshell pieces and beads.

AREA 1	Frag.	Dec.Oes	Unf.Bead	Bead	Mean(mm)	Min(mm)	Max(mm)	>7,5mm
SUR	133			3	7,5	4,5	10,5	2
GBS	124			6	5,3	4,3	7,2	0
CCG	49		2	6	4,7	3,9	5,5	0
GGW	27		4	10	4,6	3,4	5,8	0
GRO	44	1		13	4,6	3,3	5,2	0
RO	27			10	4,3	3,3	5,4	0
RR	13			2	3,8	3,5	4,2	0
AREA 2								
SUR	47			2	5,2	4,5	5,9	0
SBH	83	1	2	9	5,9	4,0	8,1	2
SLF	36		2	10	7,0	3,7	8,1	4
SLV	27		2	10	6,1	3,9	8,2	2
SL3	3							
AREA 3								
SUR	77		2	8	5,0	3,6	5,6	0
UNG	244	1	20	48	5,4	3,2	7,9	1
U2S	512	3	40	93	5,1	3,2	10,4	6
L3S	299	10	25	79	4,8	3,0	8,8	4
LHS	243	2	27	87	4,7	2,8	8,0	1
L4S	145	5	12	43	4,5	3,1	5,9	0
L4P	45	3	5	16	4,2	3,5	5,3	0

6 beads greater than 7,5 mm) also had minimum bead diameters of 3,2 mm and this figure is comparable with those of the lower units.

Two ochre-stained beads were recovered from the lower units. Furthermore, two of the beads from the upper units were of a pronounced oval shape and appear to have been manufactured in this way as they do not show signs of wear.

Marine shell: In view of the distance to the Atlantic Ocean, a surprisingly large sample of marine shell was recovered from the excavation. Six complete *Bullia* sp. shells and one *Conus* sp. shell were found. Four of these were located in Area 2, in the organic units. Only the *Conus* sp. has an aperture and shows evidence of having been strung, perhaps from the hair, in a necklace or on clothes. A large number of *Patella granatina* and *Patella argenvillei* fragments were found in Area 3 (Table 29). The fragments are all very small and it is not clear what the shell was used for. While they may have been broken up to make decorative items the only two broken shell pendants (Fig.29) recovered from the deposit were not made on limpets, but on an as yet unidentified shell. One of the pendants showed evidence of ochre staining. Evidence that herders visited the coast in earlier times has been collected (Archer pers. comm.).

Bone artefacts:The sample was small, comprising a worked bone flake, 5 broken bone points, a broken bone pendant and a fragment of a tortoise carapace bowl (Fig.29).

Subsistence information

Plant remains: One of the most significant, and unexpected, discoveries made at /Ai tomas was a small sample of well-preserved plant remains from Area 2. The plant remains were recovered from very soft, sandy lenses which appeared to be interdigitated with grey ash deposits. The plant remains showed no sign of fire damage and it is therefore possible that the ash may be in secondary context, i.e., an ash heap. The presence of *Bullia* sp. shells, a large pottery sample and several large ostrich eggshell beads would suggest that the deposit relates to the period of more intensive occupation at the site, but that this particular area may not itself have been a focus of human activity.

Table 29. /Ai tomas: Marine shell fragments.

AREA 1	
CH1	Ocenebra sp ?
GG2	?
GG3	Patella sp
OG1	?
RG	?
AREA 2	
Surface	Bullia digitalis or rhodostoma
SS/BP	?
SLS/FAS	2 Bullia digitalis and 1 unknown
SLS2/VGS	1 Bullia digitalis, 1 Turbonilla sp or Melanilla sp
SLS3	?
AREA 3	
Surface	
UNG	1 Bullia digitalis, 1 P. argenvillei, 3 Patella fragments
U2S	6 P. argenvillei, 1 unknown
L3S	4 Patella fragments, 1 Bullia digitalis, 1 Conus, 2 Choromytilis, 3 P. granatina fragments, 3 unknown
LHS	1 Conus, 1 Choromytilis, 6 P argenvillei
L4S	1 P.granatina, 1 P.argenvillei, 2 unknown
L4P	1 P.granatina

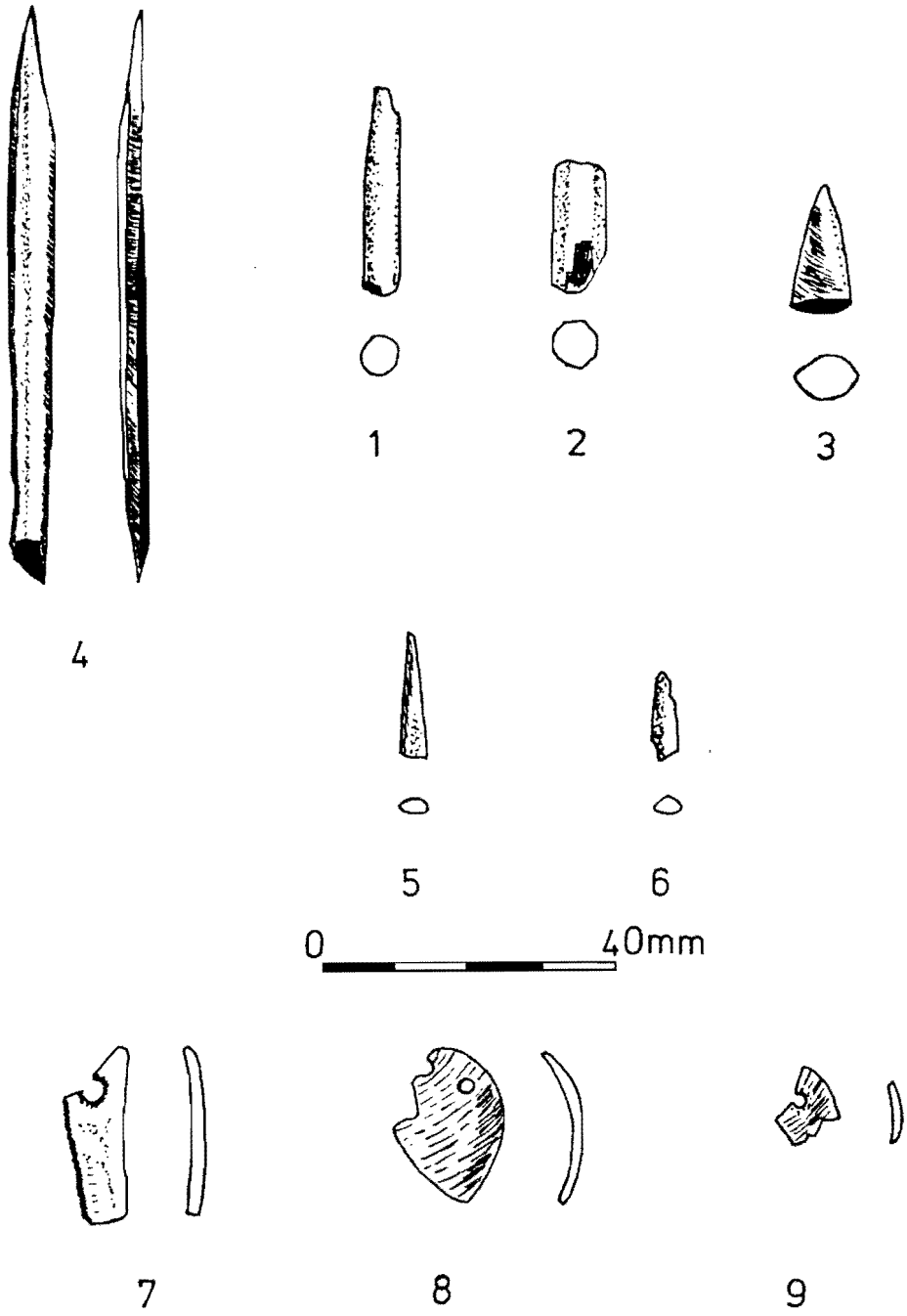

Fig. 29. /Ai tomas bone and shell artefacts: 1 = X22 LBS; 2 = Z20 HAG; 3 = X21 LBS2/3; 4 = AA23 SS2; 5 = X22 LBS; 6 = N33 GG; 7 = bone pendant from N32 CH1; 8 = shell pendant from AA23 SS4; 9 = shell pendant from X22 LBS.

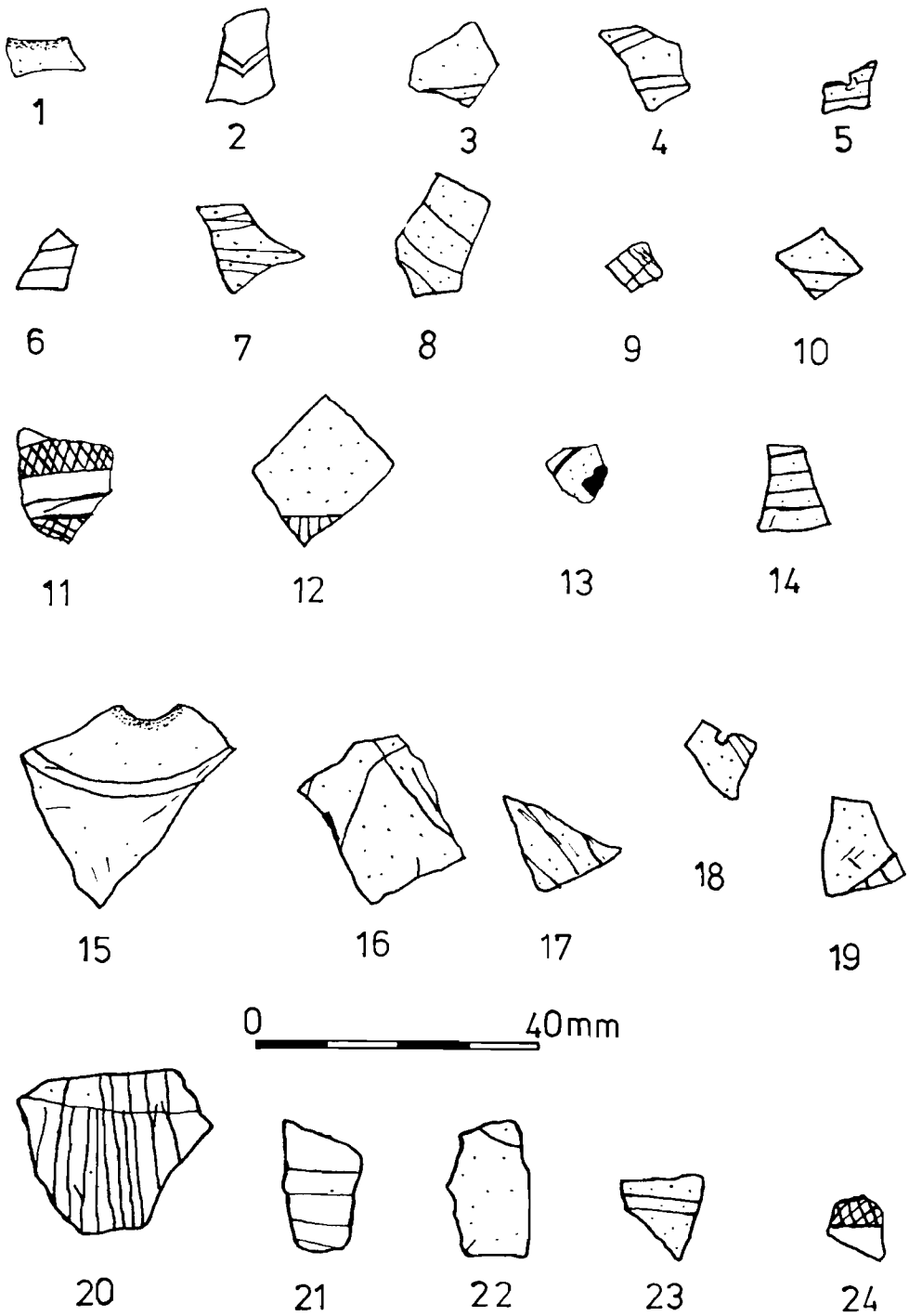

Fig. 30. /Ai tomas decorated ostrich eggshell pieces: 1 = AA23 S1 is a flask mouth; 2 = X21 Unit 1; 3 = P32 SS; 4 = X21 Unit 2; 5 = X22 Unit 2; 6 = X22 LBS; 7 = Y21 Unit 3; 8 = X21 Unit 2; 9 = X22 Unit 2; 10 = Y21 Unit 3; 11 = Z20 AG; 12 = Z20 AG; 13 = Z20 AG; 14 = Z20 AG; 15 = X21 LBS2/3; 16 = Y21 LBS3; 17 = Y21 LBS3; 18 = X21 LBS2/3; 19 = N33 GG3; 20 = X21 LBS4; 21 = X22 LBS4; 22 = X22 LBS4; 23 = X21 LBS4; 24 = X21 LBS4.

A preliminary analysis of the plant remains was undertaken with the assistance of E. Brink, curator of the herbarium at the Albany Museum, Grahamstown. The lack of an adequate comparative collection meant that we were only able to assign the corm bases to the Iridaceae family. At least three but possibly more different types of corm bases could be distinguished. A small sample of *Diospyros* sp. (probably *D. austro-africanas*) and *Rhus undulata* seeds were recovered. Such seeds are edible from October to December (F. Archer pers.comm.). A number of grass stems, unfortunately unidentifiable, were also found. Two large seeds were recovered and are presently being subjected to microscopic examination. More specific identification of the corms awaits the attention of F. Archer who is currently undertaking an ethnobotanical study of edible plants in Namaqualand. According to Archer, corms and bulbs are generally edible from the end of July to October, although much depends on the occurrence of rain during that particular year. However, the plant remains certainly suggest that the site was occupied, for a period in its history, during the spring and early summer months.

Faunal remains: Faunal preservation was generally good, although the remains were highly fragmented, as was the case at my central Namaqualand sites. The faunal remains from Areas 1, 2 and 3, analysed by James Brink of the National Museum in Bloemfontein, are not markedly different in species composition (Tables 30, 31, 32). Klipspringer (*Oreotragus oreotragus*) and dassie (*Procavia capensis*) dominate the assemblages with a small, but consistent, component of small grey mongoose (*Galerella pulverulenta*), red rock rabbit (*Pronolagus rupestris*) and sheep/goat (*Ovis/Capra*). At least two sheep/goat individuals (one juvenile and one adult) are represented in the remains recovered in Area 3 from unit L4S, dated to 1980$\pm$120 BP. These remains were recovered from square Y21 which also yielded the radiocarbon date, making the early date for domestic stock more secure. Sheep/goat remains increase markedly in Unit LHS, immediately above L4S, while large samples were also found in L3S and U2S. There is an interesting inverse relationship between klipspringer on the one hand and sheep/goat and dassie on the other (Fig.31). The former is most common in the basal three units of Area 3, after which it declines in importance. Cattle (*Bos taurus*) remains are very rare and only fragmentary portions were recovered in UNG and U2S.

Table 30. /Ai tomas: Faunal remains from Area 1 according to minimum number of individuals (MNI), number of identified specimens (NISP) and weight in gramme.

	SUR	GBS	CCG	GGW	GRO	RO	RR
Procavia capensis	3/25/14	3/61/40	1/19/8	1/12/3	1/8/3	1/17/6	1/5/3
Pronolagus rupestris	-	-	-	-	-	1/2/1	-
Leporidae indet.	-	1/1/1	-	-	-	-	-
Galerella pulverulenta	-	1/2/1	1/1/1	-	-	-	-
Oreotragus oreotragus	1/2/1	4/331/660	2/16/22	2/31/6	1/6/5	2/24/37	1/2/1
Ovis/Capra	-	-	1/1/1	-	-	1/1/1	-
Bovidae indet.							
small	-	1/21/144	1/13/6	1/3/3	1/6/4	1/1/1	1/4/1
small-medium	1/2/1	-	1/1/1	-	-	1/1/1	-
Squamata indet.	-	1/1/1	1/1/1	-	-	-	-
Chelonia indet.	1/2/1	-	1/6/3	-	1/2/2	1/2/1	-

Table 31. /Ai tomas: Faunal remains from Area 2 according to minimum numbers of individuals (MNI), number of identified specimens (NISP) and weight in gramme.

	SUR	SBH	SLF	SLV	SL3
Procavia capensis	1/3/2	5/52/27	4/76/59	4/101/83	3/15/11
Leporidae indet.	-	-	-	1/1/1	-
Galerella pulverulenta	-	1/1/1	1/8/3	1/5/1	1/1/1
Canis mesomelas	-	1/2/1	-	1/2/1	-
Oreotragus oreotragus	-	2/51/52	4/49/64	3/48/41	1/5/3
Ovis/Capra	-	-	1/2/2	1/1/3	-
Bovidae indet.					
small	-	1/10/8	1/40/33	1/12/10	-
small-medium	1/1/1	-	-	-	-
large	1/1/3	-	-	-	-
Squamata indet.	-	-	-	1/1/1	-
Chelonia indet.	-	1/3/1	1/2/3	1/1/1	-

Table 32. /Ai tomas: The faunal remains from Area 3 indicating minimum number of individuals (MNI), number of identified specimens (NISP) and weight in gramme.

	SUR	UNG	U2S	L3S	LHS	L4S	L4P
Procavia capensis	1/6/9	3/56/32	7/190/114	7/255/97	3/233/109	5/140/65	4/73/35
Pronolagus rupestris	-	-	2/12/4	2/14/6	2/10/7	1/1/1	-
cf *Lepus capensis*	-	-	-	-	1/2/1	-	-
Galerella pulverulenta	-	2/5/3	1/9/4	1/7/2	1/6/2	2/6/1	-
Canidae indet.	-	-	-	1/1/1	-	-	-
Felis cf *caracal*	-	-	-	-	-	1/1/1	-
F. lybica	-	-	?1/1/1	-	-	-	-
Raphicerus campestris	-	-	1/1/1	2/4/4	1/5/5	-	1/2/4
Oreotragus oreotragus	1/2/2	1/17/17	2/52/48	2/42/53	3/232/437	3/95/179	4/118/424
Ovis aries	-	1/1/1	1/1/2	1/1/6	1/1/3	-	-
Capra hircus	1/2/55	-	-	-	-	-	-
Ovis/Capra	1/7/7	1/3/3	1/9/10	1/16/47	1/15/13	2/2/1	-
Bos taurus	-	1/1/2	1/1/3	-	-	-	-
Bovidae indet.							
small	1/3/2	1/14/9	1/40/22	1/24/34	2/141/125	2/46/36	1/31/26
small-medium	1/5/6	1/3/3	1/19/22	1/17/26	1/12/23	2/13/66	1/4/5
large-medium	-	1/1/5	-	-	-	-	-
large	-	1/3/9	-	-	1/1/1	-	-
Squamata indet.	-	1/4/2	1/8/3	2/15/3	2/18/4	1/1/1	1/1/1
Chelonia indet.	-	1/1/2	1/20/15	1/4/1	1/9/5	1/1/1	1/1/1
Freshwater mollusc	-	-	-/1/1	-	-	-	-
Crab	-	-/1/1	-	-	-	-	-

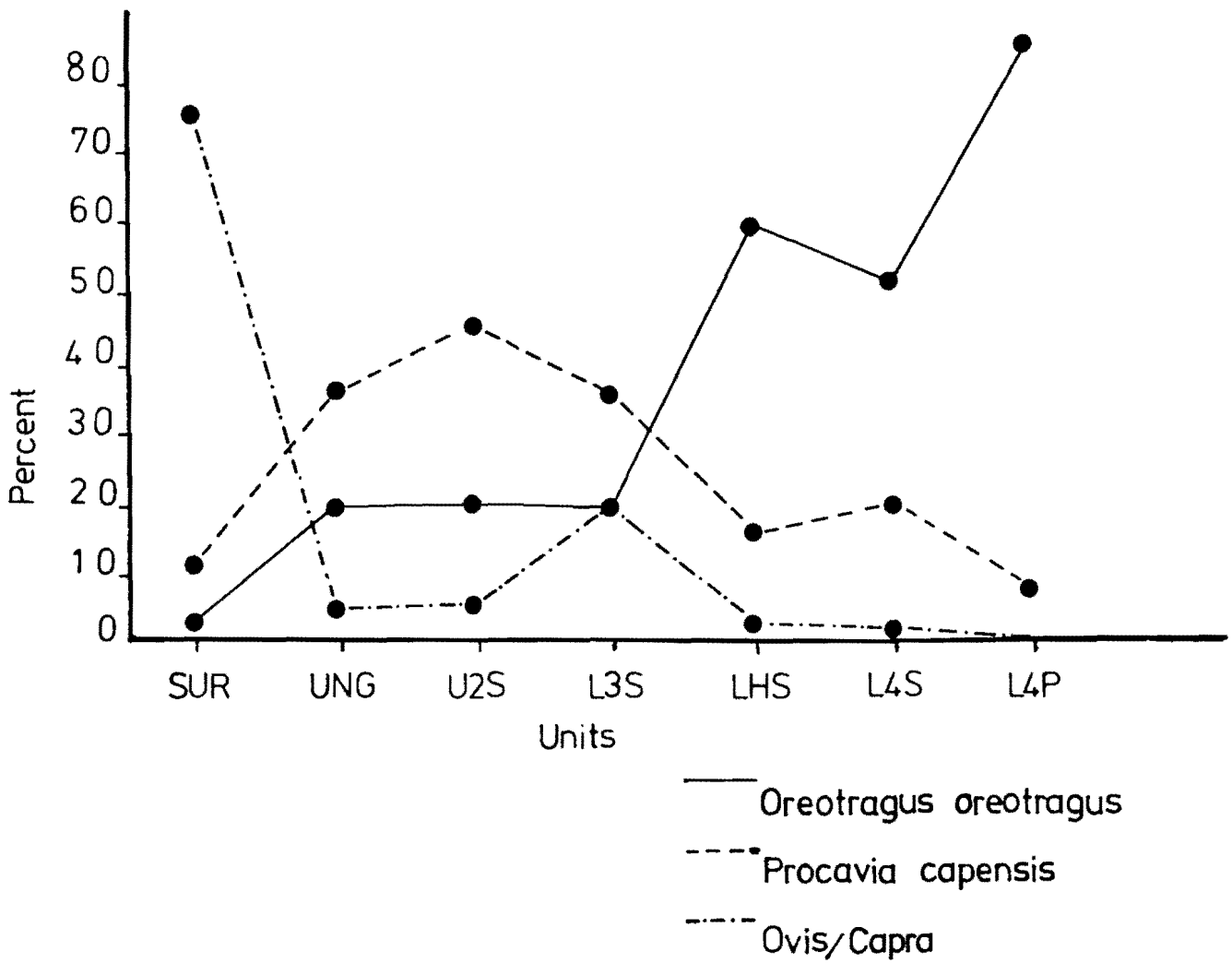

Fig. 31. /Ai tomas percentage mass of klipspringer, dassie and sheep/goat.

The faunal remains recovered from the pits are more complete, indeed in one instance it appears as if a complete adult and juvenile klipspringer were buried in a small pit. The remains in the pits seem to have been deliberately deposited after marrow extraction had taken place. The pits have no modern parallels and need further investigation. One remarkable feature of the fauna is the abundance of juvenile and foetal klipspringers. However, since these small bovids can calve at any time of the year (depending on environmental conditions), no seasonal information can be deduced from their presence. The fragmentary nature of the dassie remains also makes seasonal observations based on tooth eruption sequences unlikely. Cut marks were observed on several of the bones and one bone was coated in red ochre. In conclusion, the fauna indicates that hunting/trapping took place in the immediate rock environment of the site as no plains animals such as zebra, springbok, etc., are present. The assemblage suggests a remarkably localised exploitation strategy.

Discussion on /Ai tomas

A careful examination of the cultural material from each of the three areas has enabled me to construct a chronology of the site. Although the earliest date from the site of 1980±120 BP was obtained from close to the base of the excavations in Area 3, I believe that there is evidence for even earlier occupation of the site in Area 1. I would tend to correlate L4S (with the date of 1980±120 BP) in Area 3 with units GGW or GRO in Area 1. The relative frequencies of quartz and fine-grained raw materials match, as do the trends in the pottery and ostrich eggshell frequencies. L4P at the base of Area 3 shows the start of the increase in lithic concentration and formal tool numbers evident in GRO and RO of Area 1. These basal units probably predate 1980±120 BP; however, further excavations are unlikely to produce data which would allow us to characterise this period because of the poor preservation of charcoal and bone.

It is difficult to compare Areas 1 and 3 because there are considerable differences in total artefact concentrations, due, I believe, to their differing spatial functions. Area 1 may never have been a prime living area but may have been utilised on a more infrequent basis. Unit GBS in Area 1 (which has been dated to 420±50 BP) can also, I believe, be compared with U2S in Area 3. Both show a peak in pottery and ostrich eggshell numbers. Stone artefact numbers are not really comparable, once again because

Area 3 probably functioned more prominently in terms of continuous occupation. In addition, the evidence for large-scale ostrich eggshell bead manufacture and the presence of many marine fragments confirm that Area 3 functioned as the prime living area around the boulders.

Area 2, with a date of 330±45 BP, I believe, fits on top of the sequence in Area 1 and is also comparable with the upper units in Area 3. This is confirmed by the large number of quartz artefacts as well as the concentration of potsherds and ostrich eggshell beads greater than 7,5 mm in external diameter. Although these top units contain significant numbers of marine shell, decorated ostrich eggshell fragments and specularite frequencies have decreased considerably.

The internal homogeneity of the assemblages on both sides of the boulder can be confirmed by a number of cultural items:
(a) scrapers and backed tools in the formal toolkit may vary in frequency but are nevertheless always present; i.e., no new formal tool types are introduced;
(b) raw materials used in the production of stone artefacts also vary in frequency but, once again, no new materials are introduced;
(c) specularite is present throughout the deposit, although it also varies in quantity;
(d) decorated ostrich eggshell fragments are present from the basal units and gradually decrease in number. They do not, however, decrease or increase significantly with the introduction of pottery.

The frequency of potsherds, however, appears to be linked to an increase in the collection of ostrich eggs and perhaps to the first evidence for bead manufacture on site. The production of bone artefacts peaks just before the greatest concentration of pottery (also observed at Spoeg River). The archaeological data from /Ai tomas suggest that there may be a hiatus between short, episodic occupation of the site around 2000 BP and longer, more extensive occupation from around 500 BP.

ETHNOGRAPHIC OBSERVATIONS ON PASTORAL LAND-USE

Ethnographic research in the region (Moolman 1981; Krõhne & Steyn 1990; Archer in prep.) indicates that the small-stock farmers in the reserve recognise several different zones within which their livestock may graze. We may expect that a particular set of historical circumstances would have influenced the patterns of seasonal transhumance followed by herders today, such as the fact that herders are constrained by boundary fences and are no longer able to move to the Atlantic Ocean, across the Orange River or further afield, for example, to the Steinkopf area as they may have done in the past (Krõhne & Steyn 1990). Furthermore, historical records (Moolman 1981) indicate that the population of the region has grown considerably in the last 100 years (380 individuals in 1890, 577 in 1925, and 2 101 in 1970) and the consequent increase in livestock is certain to have contrained grazing possibilities in this arid region.

According to Melvill (1890) some 47 families lived with their headman, Paul Links, at springs around Kaboes and T'Annis in the year 1890 while a further eighteen Baster families lived at Kalkfontein some 40 miles to the south of 'Kaboes' (Khubus). These groups owned in excess of 10 000 sheep but their cattle hardly amounted to 1000. The sheep to cattle ratio was of the order of 10:1, while among the Kamiesberg Namaqua the ration was 3,8:1 in 1854, suggesting that small stock was probably always of greater economic importance in this arid region.

Historically, Hoernlé (Carstens *et al.* 1987) observed that the Little Namaqua resided at Spring Klip in the Sandveld from July to the end of October, making use of the water from rain pools at the foot of the Platberg and from Doornpoort, 10 km away. During the remainder of the year they settled at Khubus, a distance of some 20 km from Spring Klip. There is, and was, a tendency for families to graze their livestock in areas used by their parents since a detailed knowledge of the water and vegetation in a particular area is essential for effective livestock management.

A variety of patterns of seasonal movements are practised within the reserve today. Grazing along the river is considered to be an important resource during times of drought. Animals are provided with a permanent source of water and the leaves of the

trees and shrubs on the river banks are an important source of food, especially for goats. However, although small groups of herders may utilise the river throughout the year, the vegetation along the river could not have supported large groups of herders for extended periods. According to Mussgunug (in press), herders make use of the grazing along the Orange River in summer, as sheep may drink twice a day from the river during these months, and move to the foothills of the mountains (up to 10 km away) in winter in order to spare the grazing along the river. This particular transhumance pattern is confirmed by Archer as well as informants interviewed by Kröhne & Steyn (1990).

Archer (in prep.) provides another alternative, namely, that the Sandveld is used for winter grazing while the mountains are used during the summer months. Moolman's (1981) research in the southern Richtersveld indicated that in the summer months people lived around the village of Lekkersing while their stock grazed in the mountains. During the winter months they made use of the Sandveld only returning when the veld "ryp word" (ripens). He contradicts himself later, however, when he remarks that during the summer months people used to move up to 37 km from Lekkersing into the Sandveld, while during the winter they moved eastward to the mountains. This latter pattern would appear unlikely in the light of observations that stock actually deteriorate in condition when herded in the Sandveld in summer (Kröhne & Steyn 1990). According to reports, the grazing on the Sandveld is poor and moving livestock from the Helsberge to the Sandveld often leads to stock losses (Kröhne & Steyn 1990). Archer (in prep.) points to the phenomenon by which the veld in this area is said to "trek blou" (become blue) as a result of frequent fog, while the sandy areas are also reported to result in "vrotklou" (rotten hooves) in cattle as well as sheep.

In general, Kröhne & Steyn (1990) observe that goats are better adapted to the shrubby vegetation of the rugged mountain regions, while sheep and cattle prefer the grasses in the valleys and more level areas. Furthermore, cattle need to be watered every day and can therefore not be grazed beyond 10 km from a water source. Sheep and goats, on the other hand, can survive 4 days without water in the winter months and can thus be grazed up to 20 km from a waterhole. In summer they need water every second day. We may anticipate that changes in herd composition (i.e., more cattle and sheep and

less goats) in the past would have resulted in different seasonal movements. Furthermore, the utilisation of the region is dictated by the necessity of being close to sufficient water during the summer months. It has been observed that people do not generally move extensive distances as this may expose their stock to unnecessary risks such as the possibility of ingesting unfamiliar poisonous plants, such as the "krimpsiek" bushes (*Tylecodon* spp.) which are found among the karroid vegetation of the mountains. The incidence of "krimpsiekte" is highest in spring or early summer, especially in drought years, when the lambs are most at risk.

Moolman (1981) confirms Mussgunug's (in press) observations on the frequency with which individuals moved within a specific grazing zone, observing that a one large herd was moved ten times in 13 months with the furthest point some 80 km from the summer settlement. Kröhne & Steyn (1990) noted that large herds (500 animals) moved up to 16 times during the course of a year; while small herds (120 animals) moved only six times. The frequency with which herds are moved also varies with the particular amount of rainfall received that year. Both Archer (in prep.) and Mussgunug (in press) stress, however, that the high degree of flexibility observed in the region is not dictated solely by the availability of water and grazing, but is also related to a variety of social factors.

To summarise, we may note that the topographically diverse areas of the Richtersveld provide pastoralists with a variety of options in terms of seasonal mobility. We may anticipate that the Orange River must always have been an important attraction, especially during times of drought, while the mountains around Khubus would appear to have provided the most favourable grazing in the region. We may postulate that pastoralist strategies in the Richtersveld are likely to have been considerably more flexible than in central Namaqualand and that we are less likely to be able, with any degree of accuracy, to predict them for the prehistoric past.

ARCHAEOLOGICAL OBSERVATIONS IN SOUTHERN NAMIBIA

Sievers undertook an extensive archaeological reconnaissance survey in the concession area of Namibia Diamond Mining Company, southern Namibia during 1980/1. She made numerous surface collections as well as excavating test pits in a number of rock shelters. The area immediately to the north of the Orange River is closest to /Ai tomas and her results are thus pertinent to the present discussion. The undated site of Koedoeslaagte 3 in particular shows many similarities with /Ai tomas (unpublished report to the National Monuments Council). Sievers remarked on the high frequency of formal tools, in particular backed bladelets. Ostrich eggshell beads were common while sheet mica, haematite and specularite were found. Sievers also commented on the presence of limpet fragments.

/Ai tomas may also be compared with the site of Rosh Pinah, some 30 km north-west of the large bend in the Orange River. Sievers excavated two areas, obtaining a date of 760±50 BP (Pta-3512) from outside the dripline and an upper date of 330±45 BP (Pta-3579) from within the shelter (Sievers 1984). She excavated 7 square metres but recovered only 903 stone artefacts, compared with 11 709 from the 6 square metres of Area 3 at /Ai tomas. Her formal tool assemblage is extremely small but includes scrapers and backed pieces, although she says that no formal artefacts were recovered from the layers containing pottery. She also found a few pieces of specularite. Decorated fragments of ostrich eggshell as well as flask mouths were found in the pottery layers. The pottery from Rosh Pinah appears very similar to that from /Ai tomas.

Archaeological research was also undertaken by Robertshaw (1979b) at a site he called FRI, situated at the confluence of the Fish and Orange Rivers in southern Namibia. The site contained five circular stone features, a number of hearths (one dated to 90±40 BP (Pta-1895)), some middens and a few burial cairns. The bone from one of the burials dated to 190±40 BP (Pta-1902) indicating that the site relates to the colonial period. The lithic artefacts consisted of large river cobbles and only one retouched piece was recovered. The pottery was all necked, with lugs and pointed bases, in other words,

typical Cape coastal ware. The presence of two decorated ostrich eggshell fragments links it to sites like /Ai tomas.

I have summarised above the results of excavations at Spoeg River, Bethelsklip, Keurbos, Modderfontein, /Ai tomas and Frummel Bakkies as well as making brief mention of several other sites in Namaqualand. Like Robertshaw, I also encountered problems in locating sites with any depth of deposit. Apart from Middle Stone Age occupation, it appears that the region was only occupied again around 2000 years ago and, in the majority of cases, caves and rock shelters were not selected for habitation. Open sites are naturally more difficult to locate and it is only when they are situated next to large boulders, like Bethelsklip and /Ai tomas, that they may be traced. In the majority of cases, I believe that the kraals described by the early travellers have been destroyed by wheat cultivation. Limited though the data may be, it is nevertheless possible to examine the history of the region from the material presented above. The results of my analysis are presented in the following chapter.

7. THE PRECOLONIAL OCCUPATION OF NAMAQUALAND

The archaeology presented in the previous chapter indicates that the Holocene archaeological sequence in Namaqualand is not comparable with that of the western or southern Cape. All the indications are that the region was first occupied some 2000+ years ago; i.e., at the same time as domestic animals and pottery were first introduced. Evidence for pre-2000 BP Holocene deposits are scarce. Namaqualand, like portions of the interior of the country and southern Namibia, appears to have experienced a considerable hiatus in occupation in the pre-2000 BP period. Mirabib Cave in central Namibia was not occupied between 5190 and 1550 BP (Sandelowsky 1977); Apollo 11 in southern Namibia was unoccupied between 6200 and 1670 BP (Wendt 1976) and Rosh Pinah just across the Orange River from /Ai tomas was unoccupied between 8970 and 760 BP (Sievers 1984). Kinahan (1989) has remarked that intensive occupation of the coastal dunes around the Khuiseb River mouth only began around 2000 years ago, at the time pottery was introduced. Wendt (Avery 1985), for example, has recovered microlithic artefacts from Steenbras Bay Midden near Luderitz Bay in Namibia. The site has been dated to 2070±50 BP (Pta-1049) but contains no pottery, thus clearly pre-dating the first pastoralist groups in the region. All the evidence to date would support Vogel and Visser's (1981) conclusion that a lack of dates between 5100 and 2300 BP indicates a period of sparse occupation throughout southern Namibia.

Tyson and Lindsay (in press) have suggested that the north-western Cape coast may have experienced a slightly cooler and wetter period around AD 100 to 200 and this proposal appears to be confirmed by an examination of the micromammals from Spoeg River Cave (Avery in press). We may tentatively propose that the re-occupation of Namaqualand after a long hiatus may in fact have been encouraged by marginally more favourable climatic conditions ca. 2000 BP. However, I believe the impetus to migrate to new regions should not be entirely ascribed to environmental factors, as I have already argued elsewhere.

Evidence from Keurbos and Wolfkraal suggests that the hiatus noted in Namibia may have been even greater in Namaqualand and may span the period 20 000 to +2000 BP. We are therefore unable to determine what a hunter-gatherer site may have looked like prior to the arrival of pastoralism/pastoralist elements. Apart from Steenbras Bay Midden only /Ai tomas contains pre-pottery (as yet undated) units. It is certainly ironic that the region Elphick (1985:17) characterised as "extremely difficult to cross with livestock" because of its rugged terrain and low carrying capacity should have been re-occupied, after a hiatus of 20 000 years, by people with livestock. Evidence from Spoeg River and /Ai tomas supports a western route for the introduction of sheep and pottery as proposed by Deacon *et al.* (1978) and Robertshaw (1978).

A total of eight radiocarbon dates was processed during the course of this thesis and a further one obtained during the research for my Masters degree (Webley 1984). They are as follows:

/Ai tomas 1980±120 BP (Pta-5530)
Spoeg River 1920±40 BP (Pta-4745)
Spoeg River 1390±50 BP (Pta-4753)
Bethelsklip 800±50 BP (Pta-3512)
/Ai tomas 420±50 BP (Pta-5458)
Bethelsklip 360±40 BP (Pta-4741)
/Ai tomas 330±45 BP (Pta-5452)
Frummel Bakkies 160±45 BP (Pta-4763)
/Ai tomas (106.1±0.6)% (Pta-5444) calibrated as 1957/58. This recent date suggests that the sample was probably contaminated.

These dates confirm that Namaqualand was occupied during the last 2000 years; there are three sites pre-dating 1000 BP and five dates thereafter. I review below the data concerning subsistence and material culture change during this period and then attempt to provide a model for the occupation of Namaqualand. I shall refer to the theoretical material presented in chapters 2 and 4 in my interpretations.

SUBSISTENCE

Marine resources

This overview of marine resources refers only to the coastal site of Spoeg River. The basal units at this site (Phase 1) contain equal numbers of mussels and limpets but during Phases 2 and 3 limpets dominate the shellfish assemblage (more than 80%). How do we account for this switch in exploitation patterns? Changes in the frequencies of shellfish species have in the past been interpreted in terms of seasonal data. We know, for example, that the earliest red tides of the summer (in the Elands Bay area) which result in toxic mussels generally occur around September or October and last for a four-month period (Grindley & Nel 1970). A predominance of limpets in coastal middens has therefore generally been interpreted as evidence of summer occupation while mussel dominance is believed to indicate winter occupation (Robertshaw 1977). It is, of course, only the *presence* of mussels along the Cape west coast which points to season of occupation inasmuch as there is a high probability that they will be toxic between September and February. Limpets, of course, may be collected throughout the year and the fact that their dominance at a site is interpreted as evidence of summer occupation presupposes that mussels were preferentially exploited and that limpets were always only a second option. Buchanan (1988) has explained a preference for mussel collecting due to (a) easier digestibility and palatability, (b) high energy yield and (c) ease of harvesting.

If we apply this deduction to the shellfish from Spoeg River then it would appear that the site was occupied during the summer months in Phases 2 and 3 but that equal percentages of mussels and limpets in Phase 1 may indicate that occupation was spread more evenly through the year. Alternatively, we could interpret the shellfish from Phase 1 as indicating a fairly non-selective subsistence strategy adopted by people unfamiliar with the environment in the surrounds of the site. This proposal finds support, I believe, in the crayfish data from the site as well as the lack of edible plants, as discussed below.

The crayfish data from Spoeg River indicate exploitation on a sustained basis during Phases 2 and 3 but not in Phase 1. That the switch from mussels to limpets also occurs in Shelly Brown (the start of Phase 2) is hardly likely to be coincidental. We may conclude that marine exploitation during Phase 1 was quite different from the later occupation of the site and the reason for this, as I have indicated above, is linked to the recent occupation of this region.

Plant Remains

The plant remains from Spoeg River cave are interesting as they consist almost entirely of grasses (for bedding) and berries. Underground bulbs and corms supply the bulk of plant foods eaten by contemporary herders in Namaqualand (Archer in prep.), yet the plant food remains from Spoeg River contain only a few corm sheaths. However, since no ethnobotanical study has been undertaken of the Namaqualand coastal region it is not possible to determine the relative volumes of above-ground versus below-ground resources in the area and we are unable to conclude whether the exploitation of berries was a deliberate selection policy or was determined by availability or seasonality. Phase 1 contains only bedding remains while berries make a first appearance in Phase 2 and become quite abundant in Phase 3. A storage pit in Twiggy confirms that berries may have become an important resource by 1300 BP. *Euclea tomentosa* seeds become mature around October/November and *Rhus* sp. also becomes available around this time.

Boophane disticha, recovered from Phases 2 and 3, is not currently used by the pastoralist groups in Namaqualand. Thunberg (Forbes 1986:294), however, recorded its use by 'Hottentots' for poisoning their arrows when hunting smaller game like springbok. The papery, outer bulbar leaves have been recovered from a number of eastern Cape sites, some predating the advent of pastoralism. It is clearly a plant species also utilised by hunter-gatherers. The other interesting point is that *Scirpus* sp. fragments were found in unit Twiggy and, together with the evidence for the manufacture of cordage at the site, strongly suggests that the inhabitants of Spoeg River ca. AD 500 were probably in the position to construct reed mats to be used in portable huts.

H.J. Deacon (1976) and Parkington (1976) have remarked on the scarcity of plant food remains at coastal sites, even where other plant remains have been preserved, "and it has been suggested that shellfish gathering replaced plant food gathering to a large extent when coastal sites were occupied" (J. Deacon 1984:264). I have demonstrated that this was clearly not the case at Spoeg River; abundant plant food remains from the upper units in conjunction with shellfish and game remains testify to a diversified diet at the coast 1390±50 BP.

With respect to inland sites, it would appear that the upper units at both Bethelsklip and /Ai tomas (dated to 360±40 BP and 330±45 BP respectively) testify to spring/summer occupation. The absence of plant remains from the lower units from both sites, however, is ambiguous as we are unsure whether this relates to poor preservation or changes in season of occupation. The corm casings of *Cyanella hyacinthoides* and *Oxalis* spp. were recovered from units WA and BL at Bethelsklip, dated to 360±40 BP. Both bulbs become edible between August and October and are still considered important dietary supplements among certain sections of the community in Namaqualand.

Well-preserved plant food remains were also recovered from the upper units of Area 2 at /Ai tomas, dated to 330±45 BP. Small samples of *Diospyros* sp. and *Rhus undulata* seeds point to exploitation between October and December while the presence of three types of corm bases is indicative of harvesting between July and October. The plant food remains showed no sign of charring yet were recovered from an ashy horizon which would suggest that they may represent an ash heap which had been dumped away from the living area. Unlike Spoeg River, neither Bethelsklip or /Ai tomas contain any storage pits for plant foods and the absence of cordage and *Boophane disticha* also suggests differences in resource utilisation at these latter sites.

Faunal Remains

Apart from the importance of marine resources and plant foods during the approximately 500 years of occupation at Spoeg River, it would appear that the inhabitants also hunted/scavenged various game species. The single most important

mammal represented throughout the occupation sequence is that of the Cape fur seal, with peaks numbers recorded in Brown, Shelly Brown, Patella, Coprolite, Twiggy and Unit 1. A dead seal pup was found on the beach near the mouth of the estuary during the ECRU survey of 1980, indicating that seal colonies may have occurred here during the pre-colonial period. Historically, Alexander (1838:85) reported that the Namaqua swam out to Robbe Island in the Bay at Port Nolloth to harvest seal meat during the breeding season of November and December. According to Klein and Cruz-Uribe (1989), seal pups are commonly weaned nine months after birth (between mid-August to early October), resulting in a peak in mortality profiles at this period. Although the age of the seals represented in the faunal samples from Spoeg River has not been calculated, a spring/summer exploitation of seals would support the plant food information discussed above. Seals were an important part of the diet at a number of coastal sites in the southern and western Cape (Klein & Cruz-Uribe 1989), the most noteworthy being Kasteelberg, where seals and sheep (in addition to the marine molluscs) formed the bulk of the diet. The dominance of seals at Spoeg River therefore follows patterns observed elsewhere in the late Holocene.

The sheep remains from Spoeg River are of considerable importance to the focus of this thesis. Very few sheep bones could be identified from Phase 1 and the lower part of Phase 2 with only two fragments dating to 1920±40 BP and earlier. Sheep bones only become frequent in units Patella, Coprolite and BS before decreasing in frequency again.

The most abundant species represented at the site are Cape fur seal, hare, molerat, dassie, steenbok/grysbok and sheep, while there were also many unidentifiable small and small medium bovids. Considered as a whole, the various species show interesting trends through the sequence. Unit Shelly Brown, for example, contains high proportions of tortoise, hare, molerat, dassie, Cape fur seal, steenbok/grysbok and small bovids while Patella contains large numbers of hare, sheep, steenbok/grysbok, small bovids and small medium bovids. In other words, high numbers of sheep appear to be correlated with large numbers of small bovids while high numbers of seal correlate with large numbers of small mammals (dassie, hare, molerat, etc.). The latter exploitation strategy could be interpreted as opportunistic scavenging/gathering while the former

appears to suggest more intensive snaring/hunting. There is a decrease in all faunal species in Phase 3 coincident with the increasing importance of plant foods and marine resources. One possible explanation for this is that the increasing aridity experienced at the site during the summer months from ca. AD 500 meant that game moved away and visitors to the site became more reliant on other resources.

With respect to the faunal data from Bethelsklip, Table 11, combining species counts from the 1981 and 1983 excavation is presented. Only the 1981 sample (from seven square metres), however, was examined by von den Driesch with a view to identifying domestic stock and it is anticipated that figures for sheep and goat should therefore be considerably higher if the 1983 sample is included. Goat has been identified from units dating between 800±50 BP and 360±40 BP which I believe is indicative of the considerable contact and trade between the inhabitants of the Sandveld and the Briqua (Tswana), the source, it is claimed (Elphick 1977), of the goats. Furthermore, a single individual of *Ovis/Capra* was recovered from BL2, which postdates 800±50 BP. F. Thackeray (pers. comm.) has tentatively identified cattle from CS2 and CS (360±40 BP). The fauna, however, was dominated by tortoise and dassie, which occurred in greatest numbers in BL (800±50 BP) and CS2. The dentition of the dassies suggested that the site was occupied in spring/summer after 800±50 BP. Hare, steenbok, springbok and ostrich could be identified; however, the majority of the bones were unidentifiable because of their fragmentary nature and could only be assigned to Ungulate size classes I, II and III.

The faunal sample from Keurbos consisted of the remains of eight dassies buried in a pit near the wall of the cave. Tooth eruption patterns suggested that the site was occupied during late summer and autumn.

The fauna from /Ai tomas was also of considerable interest in terms of the concerns of this thesis. There is an inverse relationship between klipspringer on the one hand and dassie and sheep/goat on the other. *Small fragments of Ovis/Capra* were present down to units dating to 1980±120 BP, suggesting that domestic stock were introduced into Namaqualand some 1900 years ago. Klipspringer dominated the assemblage in the basal three units after which it declined in importance as sheep/goat and dassie became

popular (Fig. 31). Sheep/goat numbers remain consistently low until the surface unit however, indicating that they may only have been present in small numbers at the site. A number of juvenile and foetal klipspringers were excavated from pits, suggesting an unusual disposal pattern not commonly encountered among contemporary herders in the region.

CULTURAL MATERIAL

Lithic Analysis

An examination of the lithic tables shows that there is no evidence from any of the sites for a replacement of one technological tradition by another. Neither does artefact morphology differ significantly between sites. Despite the small sample size, it is possible to suggest a gradual reduction in formal tool percentages at Spoeg River Cave through time, from 3,2 % in Phase 1 and 1% in Phase 2 to 0,9 % in Phase 3. This trend toward less formal tools at coastal sites is already apparent on the southern Cape coast some 3000 years BP (Appendix 1) and Spoeg River confirms that it also occurred on the north-western Cape coast between 1900 and 1300 BP. The reduction in the number of formal tools appears to have taken place gradually and post-dates the first appearance of sheep and pottery at the site. Spoeg River is unique in providing a sequence which spans this crucial period, thereby enabling us to determine whether an informal toolkit was indeed introduced by pastoralist groups. Coinciding with the decrease in formal tools after unit Brown, there is the first appearance of rounded quartzite and granite cobbles (some with evidence of ochre staining) in unit Ashy Soil. These items are especially abundant in Patella, which also contained the largest number of sheep bones.

Formal tool percentages at the interior Sandveld site of Bethelsklip are also low: four of the five units contain less than 1 % while only BBLL4 has 1,8 % formal tools (1981 excavations). There is no noticeable decline in formal tools through the sequence but there are interesting variations in the frequencies of segments, scrapers and backed pieces with only a few, very informal, adze-like artefacts from Bethelsklip. Very few ground stones were recovered from this site.

/Ai tomas produced the largest number of formal tools of any of the sites under examination. This site contains relatively large numbers of backed flakes and blades and, although formal tool frequencies vary through the sequence, there are no changes in style which would suggest an incursion of social group from elsewhere. Like its fauna, this site exhibits a remarkable internal homogeneity in artefact manufacture. Backed microliths are frequently assumed to have been mounted as armatures on arrowheads but a microscopic examination of two backed silcrete pieces from the lower units in Area 3 by J.N.F. Binneman (pers. comm.) suggested otherwise. The microwear is similar to that observed on segments and consistent with the polish obtained through cutting up soft plant material, i.e., grasses and sedges rather than wood. J. Brink (pers. comm.) has suggested that the abundant klipspringer in the faunal assemblage may have been trapped rather than hunted with a bow and arrow (they are currently hunted with dogs and sticks); and the high proportions of backed artefacts in the lithic assemblage need therefore not necessarily be correlated with the game represented at the site.

A single fragment of a bored stone was recovered from the surface collection at /Ai tomas, while a further six upper grindstone fragments were also recovered from the surface in front of Area 3. Excavations in this area enlarged the sample by an additional 13 fragments; and two complete upper grindstones with ochre staining were recovered from a pit in LBS4 dated to 1980±120 BP. In the case of /Ai tomas, therefore, grindstones start appearing despite high percentages of formal tools. A number of what resemble *//khom* stones were recovered from Area 3 (Webley 1990). However, it is frequently impossible to be absolutely positive about their identification. The fact that their shape is quite unlike the classic 'Wilton' scraper may indicate that two groups of people with quite different lithic technologies occupied the site within a relatively short space of time.

With respect to the lithics recovered from Frummel Bakkies, Area 3, with its large potsherd sample, contained a predominance of backed microliths, one scraper and no adzes. Area 4 was also dominated by backed blades and flakes but there are preportionately more scrapers and at least two adzes. Formal tool frequencies increase through the sequence. The stone circle in Area 5 contains the lowest number of stone artefacts and the associated trade bead would suggest a fairly recent date.

Scrapers from all the sites under discussion have been measured and the width/length ratios calculated. It is possible that changes in scraper shape through time could be linked to internal changes within the society while significant differences in scraper shapes between contemporary sites could be an indication of different identity-conscious groups. Unfortunately scraper samples from the majority of sites are too small to make statistical testing feasible. It would appear that the scraper shapes from the lower units at Spoeg River are the widest of all. Contemporary scraper sizes from /Ai tomas are closer to a circular plan form. At both Spoeg River and Bethelsklip there is a tendency for scrapers to be wider in the lower units and to become more circular through time. The mean width/length ratio of scrapers from UNG at /Ai tomas is 123 which matches that obtained from the sample of 57 scrapers obtained from the surface of the site. Similar scraper shapes have been recorded from Areas 4 and 5 at Frummel Bakkies in western Bushmanland. Scraper measurements seem to link Spoeg River and Bethelsklip on the one hand and /Ai tomas and Frummel Bakkies on the other.

It would appear from the above that certain sites contain larger proportions of specific formal tools than others. So, for example, scrapers are more common in the Sandveld while backed tools predominate in Bushmanland and the Richtersveld. It is significant that adze numbers are low at all sites suggesting that they may not have been necessary in the manufacture of digging sticks or other woodworking activities.

Certain artefacts are more likely to be associated with a specific sex, so bored stones and grindstones are generally considered to have been used by women. Only one fragment of a bored stone was found at /Ai tomas. Although it may be argued that bored stones were frequently curated, this artefact is extremely scarce in Namaqualand when compared, for example with the western Cape, suggesting that it may never have been an important component of women's gathering activities. Nevertheless, the presence of corm casings from edible bulbs at Spoeg River, Bethelsklip and /Ai tomas confirms that digging sticks would probably have been used in their procurement. Contemporary herders in the Communal Reserves collect plant foods with an iron digging stick (uintjie yster) but we may infer that in the prehistoric past wood was used instead. According to Archer (pers. comm.), these sticks were sharpened by rubbing the tips against large granite boulders. It is therefore conceivable that one of the

functions of the oval grinding grooves encountered throughout Namaqualand could have been related to this. These grinding grooves are found in the granite bedrock at the majority of pans in western Bushmanland and portable grooved stones are also found in the Kamiesberg and the Sandveld. Although people generally remark that they were used by 'Bushmen' when sharpening their arrows, it is clear that other explanations need to be considered. Smith (1986b) has linked the grinding grooves at Kasteelberg to the grinding of red ochre with facetted upper grindstones, which have been recovered from his excavations. Portable grooved stones from his excavations date to around AD 900.

It may be plausibly argued that lower grindstones would have been cashed, rather than curated, but it is the upper grindstones which are most commonly recovered from Namaqualand sites. In view of the large number of grinding grooves at Frummel Bakkies, it is interesting to note that only 3 upper grindstone fragments were recovered from the excavations and surface collections. At least thirteen upper grindstones and fragments were recovered from Area 3 at /Ai tomas, several of which were ochre-stained, yet this particular site contained no evidence of grinding grooves. Rounded cobbles which possible served as upper grindstones were also recovered from Spoeg River Cave down to unit Ashy Soil (i.e., dating to between 1920±40 and 1390±50 BP) and at least three of the total of ten pieces were ochre-stained. There is, once again, no sign of grinding grooves on the granite bedrock around the cave. Four grindstone fragments were found at Bethelsklip, all dating to between 800±50 and 360±40 BP. None, however, were found at Keurbos, Wolfkraal and Modderfontein, although the latter site did have a grinding groove in granite bedrock nearby. There is obviously no one-to-one correlation between grinding grooves and upper grindstones in Namaqualand, although this observation does not invalidate findings further south. I am of the opinion that there is an association between ground stone tools and domestic stock, as has already been observed at Kasteelberg, but that the reason for this has not been adequately addressed.

Pottery and its significance

Using diagnostic potsherds (decoration, lugs, bosses, spouts, etc.) from archaeological excavations, I have attempted to establish a chronology of pottery style from

excavations, I have attempted to establish a chronology of pottery style from Namaqualand. Although Spoeg River and /Ai tomas contain potsherds dated to 1920±40 BP and 1980±120 BP respectively, none are diagnostic. The earliest decorated sherd immediately pre-dates 1390±50 BP and comes from Spoeg River Cave. It consists of horizontal grooved lines beneath the rim (Fig.8). Other decorative motifs are illustrated in Figure 8 and include the characteristic oval impressions common throughout Namaqualand.

Bethelsklip contains a lug, and a partially reconstructed neck of Rudner's (1968) Type C with incised impressions beneath the rim, from units pre-dating 800±50 BP (Fig.17). A spout was found, dating to between 800±50 BP and 360±40 BP, as was a sherd with circular incised impressions. Two different sherds decorated with horizontally grooved lines are dated to 360±40 BP (Fig.15 & 16).

/Ai tomas contains no diagnostic pottery dated to 1980±120 BP. A lug and a sherd with a repair hole date to between 1980±120 BP and 330±45 BP (Fig.28). A sherd with horizontal grooves beneath the rim, one with incised circular impressions, and a lug from Type B vessel with incised oval impressions beneath the rim all date to after 1980±120 BP (Fig.28). A sherd from the surface, with diagonal lines on the lip and horizontal lines along the rim, is identical to that dating to 1390±50 BP from Spoeg River Cave (Fig.8). In Area 2 of the site two sherds with incised oval/circular impression date to after 330±45 BP. Five lugs from different vessels and five sherds with oval impressions (from different vessels) were recovered from the surface in front of Area 3 (Fig.27). One of the intriguing features of Khoekhoen pottery is the high frequency of sherds with drilled holes. The example from /Ai tomas indicates that the Namaqua, like many other Khoekhoen groups, attempted to repair their ceramic vessels (Rudner 1968, Sydow 1967). Why did people repair pots since pot-making must surely have been a routine activity? We can only suppose that not all groups manufactured pots on a regular basis and that there may have been a degree of craft specialization, with those groups close to good sources of clay producing a surplus to exchange for other items. Ceramic vessels appear to have been quite scarce and when broken were repaired if this was possible.

Frummel Bakkies in western Bushmanland contained an extensive potsherd distribution. Collections from five areas have been discussed and are illustrated in Figure 24. Only Area 4 contained decorated sherds, although occasional decorated pieces were found scattered across the entire site. A date of 160±45 BP from Area 4 was associated with at least ten decorated sherds and one lug. Decoration consisted of horizontal lines beneath the rim (four sherds), diagonal lines on the rim (one sherd), crescent-shaped incisions beneath the rim (one sherd), oval/circular impressions beneath the rim (two sherds) and diagonal lines on the lip with horizontal grooves beneath it (two sherds). The last decorative motif is the same as that discussed from /Ai tomas and Spoeg River. The superficial survey of the site (excluding the five areas sampled) produced two lugs, one sherd with horizontal grooves beneath the rim and one rim with oval incisions on a scalloped edge, the only decorative motif of its kind documented from Namaqualand.

Archaeological specimens are frequently too small to reconstruct vessel shape and for this reason I have also examined an additional 32 complete, or partially reconstructed, clay pots which have been recovered from Namaqualand. This includes eight from the coast (Rudner 1968), 19 collected by Rudner (unpublished report) from the inland areas and five examined by the author also from the interior. Most of these pots have little or no contextual information; nevertheless, an examination of their attributes (such as vessel shape and decoration) allows us to characterise the ceramic vessels most commonly encountered in the region. Using Sydow's (1967) and Rudner's (1968) definitions of vessel shapes, 23 are Type C (necked), 4 are Type B (bag-shaped), 3 are Type A (bowls) and 2 are Type D (with spouts). The majority of the vessels could therefore be described as amphora-shaped, with a long neck. Ten of the vessels (31%) are decorated, 12 vessels (37%) have lugs, 14 (43%) have bosses and 2 (6%) have spouts. Of the ten decorated vessels, six also have bosses, two are associated with lugs, one bowl is decorated and one vessel with a spout is decorated. In other words, decoration is most commonly associated with bosses rather than with lugs. Decoration consists of oval/circular incisions just beneath the rims (four vessels), vertical incisions just beneath the rim (two vessels), horizontal lines beneath the rim (one vessel), diagonal lines beneath the rim (one vessel), oval incisions on the rim (one vessel) and a combination of oval incisions/diagonal lines and horizontal lines (one vessel). If one examines the decorated potsherds collected and illustrated from this region by Rudner

(1968), then it is clear that incised oval/circular impressions are most common, followed by horizontally-grooved lines. In general, one could conclude, as do Rudner (1968) and Sydow (1967), that pottery from Namaqualand and southern Namibia is sparingly decorated, consisting of the occasional boss or restricted to rows of lines or dots. Regions where potsherds/ complete pots are most commonly encountered include the Orange River area (Vioolsdrift, Goodhouse etc.), the northern Namaqualand coast (Alexander Bay, Port Nolloth, Kleinsee), the Steinkopf/O'OKiep/Nababeep area as well as the Kamieskroon area, which would suggest that these are core areas of Namaqua/Khoekhoen occupation. Rudner (1968) points out that the richest area for inland 'Hottentot' pottery is along the Orange River in the area between the Aughrabies Falls and Prieska as well as in northern Bushmanland.

With respect to the function of the various pot types, several caches of pots containing specularite, as well as copper slag and ostrich eggshell fragments have been recovered from Namibia (Sydow 1967; Jacobson 1977) and an examination of the morphology of these vessels shows them to be Types C and D. Sydow (1967) has indicated that those vessels most commonly encrusted with soot are Types A and B, which has resulted in Jacobson (1977) suggesting that there could be a correlation between vessel shape and function, types C and D being used to store valuable commodities while Types A and B were used for cooking. An additional observation, by Kinahan (1989), noting that highly decorated potsherds fragments from the !Khuiseb on the Atlantic Coast were frequently associated with pieces of specularite, also suggests a correlation between decoration and contents.

More accurate information on the nature of the organic material adhering to the interior of potsherds from Kasteelberg indicates it to be of marine origin (Patrick *et al.* 1985). The authors are confident that it can be identified as belonging to the Cape fur seal and suggest that seals may have been boiled to render the fat. Unfortunately, these archaeological specimens do not allow vessel shape to be determined and there is no indication of decoration on any of the sherds sampled. Organic residues on potsherds have been reported from many archaeological sites and it is clear that at least some ceramic vessels were used for preparing food. We are unable to confirm that all ceramic vessels fulfilled this purpose. At present, it would seem that there is no clear

correlation between vessel shape, decoration and the presence/absence of soot encrustation.

Rudner (1968:602) has suggested that undecorated pots of Type C1 with bosses (which may later have developed into internally reinforced lugs) are the earliest type of pot and may have spread along the Orange River to its mouth in the first millennium. From the coast it would have spread rapidly southward to the south-western Cape, where it developed into Type C2. Three complete Type B (bag-shaped) pots from Namibia have been dated directly on soot encrustions to 620±40 BP (Pta-902), 310±20 BP (Pta-1801) and 50±45 BP (Pta-1625), confirming that bag-shaped pots were used for cooking and that they date to within the last 1000 years (Vogel & Visser 1981). There is insufficient evidence at present from Namaqualand to construct a ceramic sequence for the region, such as that observed for the southern Cape (Schweitzer 1979) and eastern Cape (Hall 1990; Leslie-Brooker 1987). Sadr & Smith (1991) have seriated the extensive ceramic assemblage from Kasteelberg and claim that they are able to distinguish ceramics generally associated with pastoralism from those associated with hunter-gatherers. In the discussion below I return to this issue.

OTHER CULTURAL ITEMS

Bone implements

Relatively few bone artefacts were recovered from the sites under discussion. Seven items of worked bone were recovered at Spoeg River. A single linkshaft from the base of Phase 2 suggests hunting activities during this period; the other items include bone points and awls. There was no particular concentration of bone items in any unit but bone implements first occur in Phase 2. A tortoise-shell bowl was recovered from Twiggy. Only three items of bone were recovered from Bethelsklip despite an excavation covering fifty square metres. This included a bone bead, a broken bone point and a broken bone pendant, all pre-dating 800±50 BP. No bone implements were found at Wolfkraal, Keurbos, Modderfontein and Frummel Bakkies. The absence of bone linkshafts and points from the lastmentioned site may be linked to the poor preservation of organic remains at this site. Seven items of worked bone were recovered from /Ai

tomas. The majority of items consisted of broken bone points. One broken bone pendant was recovered from CH1, pre-dating 420±50 BP. Although it could be argued that bone items were curated and not readily discarded, there is very little evidence for the manufacture of bone implements such as, for example, at Kasteelberg (Smith & Poggenpoel 1988) and Die Kelders (Schweitzer 1979).

Humphreys (1979) and Sampson (1972) have suggested that bone points and metal armatures may have replaced backed lithic inserts during the late Holocene and an increase in bone points and linkshafts have been observed at both Die Kelders (Schweitzer 1979) and Kasteelberg (Smith & Poggenpoel 1988). Despite this prediction however both Bethelsklip and Spoeg River, which contain low percentages of backed tools, contain no evidence for an increase in bone points as we would expect if hunting with a bow and arrow had continued to be an important facet of hunting.

Ostrich eggshell beads

Recently, Jacobson (1987a, 1987b) and Yates (Hart 1989; Schrire & Deacon 1990) have raised the possibility that external bead diameters as well as internal aperture measurements (Yates pers. comm.) of ostrich eggshell (OES) beads may allow us to distinguish a herder site from a hunter-gatherer site. They have noted that beads show an increase in size after 2000 BP which may be linked to the arrival of pastoralism in southern Africa. In this analysis I have considered only the external bead diameters from my Namaqualand sites. Aperture measurements, while also significant, were not undertaken because of the absence of comparative data from this region.

While Jacobson (1987a, 1987b) emphasises the importance of beads in the 7,5 mm class, Yates (Hart 1989) is of the opinion that although bead sizes in excess of 7,5 mm do occur in ceramic times, most of these samples show a mean of between 6-7 mm (Yates pers. comm.). Most early pottery assemblages have a mean bead size of around 5,0 mm while pre-pottery assemblages do not have bead sizes exceeding 4,9 mm. In general, pre-ceramic beads tend to show mean external diameter in the region 4,5-4,9 mm.

With regard to Spoeg River Cave, the earliest phase of occupation, dated to 1920±40 BP, has a mean bead diameter of 4,5 mm (Yates measured a mean of 4,8 mm from this sample), which falls well within the hunter-gatherer range although both pottery and domestic stock are present in small numbers during this phase. The second phase has a mean of 4,9 mm (Yates' mean is 5,1 mm), which according to Yates, would be a borderline hunter-gatherer/herder situation; indeed it is during this phase that that sheep/goat numbers increase substantially. The final phase, dated to 1390±50 BP, has a mean diameter measurement of 5,8 mm (Fig.9). This is very close to the mean of 6,0 mm obtained for the site of Geduld in Namibia, considered by Jacobson (1987a, 1987b) to be an early herder site on the basis of pottery and dung horizons, but further comparisons with this site would be futile until the Geduld site has been analysed in greater detail.

With regard to Bethelsklip, only the 1981 bead sample of 49 beads (out of a total sample of 110 beads from both excavations) was subjected to superficial examination. The bead collection was recovered from an area of approximately 50 x 50 m, indicating the extremely low density of beads on site. Only two unfinished beads were recovered confirming that bead manufacture probably did not take place at the site. Beads of up to 8 mm were recovered down to unit BLL but none greater than 7 mm were found beneath this. Although the sample is small and the beads were measured without the aid of calipers, it would appear that the top three units have mean bead measurements exceeding 5 mm while the lower units produce beads with diameters less than this.

The three areas around the boulders at /Ai tomas need to be considered separately. Although the samples are small, all the units in Area 2 would appear to fit within the 'pastoralist' bead size range, i.e., the mean exceeds 5,2 mm. However, only the top two units in Area 1 fall within this range, after which there is a gradual decrease in the mean bead size down to bedrock (Table 28). In both cases, the upper deposits yielding these larger beads date around 330±45 BP and 420±50 BP. With respect to Area 3, the top three units have mean bead sizes exceeding 5 mm. Like Area 1, the beads decrease in size with unit L4S, dated to 1980±120 BP, producing a mean of 4,5 mm, while no beads with a diameter greater than 6 mm are present. It is this unit which has produced the earliest evidence for sheep/goat from the site. The substantial increase in

sheep numbers in the overlying unit (LHS) is correlated with an increase in the maximum size of beads up to 8 mm. Larger beads tend to correlate with those units showing a peak in potsherd numbers.

Because of the small number of beads recovered from Frummel Bakkies, Yates combined the bead measurements from all five areas to obtain a mean diameter of 6,7 mm. However, the largest number of both finished and unfinished beads was recovered from Area 4 (6 complete beads, 5 broken beads and 23 unfinished beads), while Area 3 contained only one unfinished bead. There is very obvious evidence for bead manufacture at Area 4 indicating a rather more extended occupation than at Area 3. There are three very large 'beads' in the sample, ranging between 11 mm and 13 mm diameter.

No attempt has been made to date, to interpret the underlying reasons for the increase in ostrich eggshell bead sizes after 2000 BP. This is largely due, I believe, to the lack of ethnohistorical information on the topic (see chapter 3). However a recent examination of the grave goods associated with a burial excavated at Klasies River Cave 5, on the southern Cape coast, has provided some fascinating clues in this regard (Binneman & Webley in prep.). The young female individual has been dated to 1860 BP (Binneman pers. comm.) which is only slightly earlier than the first evidence for sheep and pottery in the southern Cape. She wears a string of 735 ostrich eggshell beads around her hips. The mean external diameter of these beads amounts to 5,1 mm. The arrangement of beads in the vicinity of her neck and chest are of particular interest, however, as they are aligned in a way which suggests "that they were embroidered onto a square of leather" or formed part of a small, decorative rectangle suspended around her neck (Hall & Binnemam 1987:142). The absence of any evidence for a necklace makes the former proposal more likely. The 269 beads from the chest area have an external mean diameter of 3,7 mm which is considerably less than the mean for the string of beads around the waist. I am not suggesting that the female burial represents a Khoekhoen individual, however, it is instructive to note that during the post-2000 BP period beads of different sizes were utilized for different purposes. So beads strung in a girdle were larger than beads sewn on clothing and this variability in bead sizes occurred even within a single hunter-gatherer band. It would be pure speculation to

extrapolate from the above case study to that of the Little Namaqua Khoekhoen, however, I believe that changes in bead sizes during the post-2000 period do appear to be linked to changing styles in female dress discussed in chapter 3.

Decorated ostrich eggshell

Numerous fragments of decorated ostrich eggshell were found at /Ai tomas. Decoration consists of cross-hatching as well as horizontal and vertical lines. Several badly weathered pieces were identified at Frummel Bakkies. Decorated ostrich eggshell fragments seem to be a feature of northern Cape sites, such as Wonderwerk Cave, Dikbosch and Limerock (Humphreys & Thackeray 1983) as well as the site of Rosh Pinah in southern Namibia (Sievers 1984) and their presence, as well as that of specularite, points to links with the northern Cape sites.

Shell and bone items

No shell or bone pendants were recovered from Spoeg River and, despite its position on the coast, there is no evidence that shells were strung as beads, etc. A single, broken abalone pendant was recovered at Bethelsklip in a unit dating between 800±50 BP and 360±40 BP and two cowries are dated to 360±40 BP. A broken bone pendant was also found at this site. No pendants or marine shell beads were found at Keurbos, Wolfkraal, Modderfontein or Frummel Bakkies. Two marine pendants and one bone pendant were recovered from units post-dating 1980±120 BP at /Ai tomas. Two *Bullia* spp. and two *Conus* spp. shells were recovered in Area 3 at the site and at least four *Bullia* spp. shells were recovered from among the plant food units in Area 2 (post-dating 330±45 BP). These marine shells could well have been strung in the hair, as early illustrations suggest.

Trade beads

A single blue trade bead was recovered near Area 5 at Frummel Bakkies and a white bead between Areas 3 and 4 at the same site. Bethelsklip (Webley 1984) produced five trade beads all pre-dating 360±40 BP, although it should be borne in mind that these

small beads may easily move through the deposit. Three of the beads are of glass, one is of metal and one of porcelain. The presence of these trade beads links these sites to wider trade networks.

Marine shell fragments at inland sites

A small sample of marine shell fragments was recovered at Bethelsklip, which is situated some 50 km from the coast. These shells may have been curated for various reasons by the inhabitants of the site or may have been intended as raw material for pendants. The marine fragments from the 800±50 BP units consist of mainly *Choromytilus meridionalis* which is gradually replaced in frequency by *Patella* spp. fragments. A fragment of *Donax serra* suggests that sandy beaches were also visited. A small number of *Patella* spp. fragments were also recovered at Frummel Bakkies, the majority coming from the ash heap in Area 5. This site is several hundred kilometres from the coast and the presence of Patella spp. shells instead of the more decorative marine shells suggests that they may have fulfilled an economic function. Apart from the complete *Bullia* spp. and *Conus* spp. shells mentioned above, the majority of marine fragments recovered from /Ai tomas consisted of *Patella granatina* and *P. granularis*. They are especially numerous in Area 3 in units post-dating 1980±120 BP although they are also found in this unit. According to Archer (pers. comm.) inhabitants in the Richtersveld reserve recall visiting the coast (a distance of some 50 km) in the past.

Rock art

Wolfkraal contains some unusual 'sun' design rock art which to date have been recorded at only two other sites in Namaqualand. Similar sun designs have been noted at the small rockshelter of Brakdam on the Kamiesberg mountain and a tracing was made of sun designs at Nieuwoudtville near the Groenrivier (Albany Museum records). These unusual rock paintings consist of circles enclosing cross-hatching and according to Sievers (unpublished report to the National Monuments Council), rock paintings of circles with vertical lines inside them in cave as well as rock engravings with 'spoke-wheel' designs are also present across the Orange River in southern Namibia.

Similar rock engravings have been reported from Bloeddrift on the Orange River (Smith pers. comm.). The designs could be interpreted as entoptic phenomenon but are not associated with any other trance-related rock art.

Crude black handprints have been recorded from Kangnas in western Bushmanland (Rudner & Rudner 1968) and Beaumont (pers. comm.) has observed some schematic ladder paintings in a cave at Leeuklip, also in western Bushmanland. Naturalistic paintings of animals have been reported only from Klipfontein, near Springbok. The fact there are relatively few rock art panels in Namaqualand and the nature of the art contrasts with the wealth of rock art in the south-western and western Cape. I have discussed the view presented by Parkington *et al.* (1986), namely, that the arrival of pastoralist groups in the western Cape placed stress on the indigenous hunter-gatherers, who moved into the mountainous regions; with increasing trance performance to resolve these conflicts there was a concomitant resurgence of rock art ca. 1700 BP and later. The scarcity of rock art in Namaqualand may be interpreted in several ways. Since the region was possibly only inhabited on a sustained basis soon after 2000 BP hunter-gatherer groups may only have settled in the region at the same time as pastoralist groups; they may have consisted of relatively small groups and may consequently not have experienced the same tensions as groups further south. They may therefore not have felt the need to paint, although they possibly did perform trance dances, like the /Xam in the northern Cape. Alternatively, the paintings could have been undertaken by pastoralist groups.

Burials

There would appear to be no clear indication at present that there were any differences between Khoekhoen and hunter-gatherer burial practices. According to Laidler (1929), who excavated some thirty-six burials in Namaqualand, the Namaqualand Khoekhoen were generally buried in an upright, flexed (sitting) position. In the majority of cases the body faced east. The extended position only became popular after 1850 as a consequence of missionary influence. The body was generally covered in a kaross but grave goods were not generally included. According to Laidler (1929), the Namaqua did not believe in an afterlife and merely buried the dead because of the fear they had

of inhaling odours from decaying corpses. According to numerous accounts, large cairns were constructed over the burials.

DISCUSSION

Chapters 2, 3 and 4 have dealt in depth with the manner in which material culture may be manipulated by interested parties (age groups, gender divisions) within a society as well as between different societies. I have pointed out that some items of material culture may be withheld from between-group boundary maintenance because they are used in within-group boundary maintenance. In this chapter, I consider the archaeological evidence for the existence of two distinct 'ethnic' groups or two cultural traditions in Namaqualand.

The most important point to emerge from the subsistence data reviewed above is that of the identification of sheep/goat at /Ai tomas, Spoeg River and Bethelsklip. The lower date of 1980±120 BP from /Ai tomas for sheep/goat is of particular interest to this thesis. It should be remembered that this site is not on the coast, nor on the Orange River, but right in the centre of the Richtersveld. The aridity of the region does not appear to have deterred people with livestock from occupying it at approximately the same time period as the rest of Namaqualand. An equally early date for sheep was obtained from the coastal site of Spoeg River Cave (1920±40 BP), suggesting that domestic stock spread rapidly southward, so that virtually contemporary observations have been made in the southern Cape. These two dates of close on 2000 BP for sheep and pottery from Namaqualand suggest that Elphick (1985) may have been premature in dismissing the western route of pastoral migration because of its rugged terrain and low rainfall. Accelerator dating of the sheep bones are a necessary prerequisite before firm conclusions may be reached.

The faunal samples from the sites of Keurbos, Wolfkraal, Modderfontein and Frummel Bakkies are small and an analyses of the species represented have not been undertaken. Domestic stock remains have been identified from all three sites (Spoeg River, /Ai tomas and Bethelsklip), which produced sufficient faunal material for analysis. At none of the sites does domestic stock appear in sufficient numbers to suggest that it formed

the bulk of the diet. It is important to emphasise here that "the economic importance of a resource is dependent upon inter-related cultural factors such as supply and demand and the complexity of use, *not numerical abundance*" (Huffman 1990:5 my emphasis). The fact that sheep/goat samples from Spoeg River, Bethelsklip and /Ai tomas are small does not mean that these animals did not figure prominently in the social life of the group concerned. Comparing the relative abundance of domestic stock with that of game from a particular site is, in my opinion, an inadequate measure of the degree of importance of domestic stock in the economic and social life of the inhabitants of that site. It is suggested that a detailed analysis of body part distributions and cut marks on large samples of domestic stock (such as those from Die Kelders, Boomplaas and Kasteelberg) may provide a more valuable index for isolating a pastoralist 'signature' than calculations of domestic stock frequencies.

Klein (1984:289) has observed that "early herders in South Africa relied heavily on nondomestic foods for subsistence", with the aim, I believe, of increasing their herds. Both Spoeg River and /Ai tomas indicate that, while sheep are present in faunal samples circa 1900 BP, they did not represent a significant portion of the diet of the region's inhabitants. Furthermore, the inhabitants of the sites under discussion exploited a narrower range of fauna than might have been anticipated. Skead (1980) has indicated that gemsbok, eland, hartebeest, quagga, zebra, kudu, buffalo and springbok were present in Namaqualand, as well as elephant, giraffe, all the carnivores and the full range of small mammals; yet large game was not hunted on any sustained basis. This scenario is entirely consistent with observations made by Klein (1984:289) who has remarked with reference to the fauna from Boomplaas and Die Kelders that "the variety of well-represented indigenous mammal species in the sheep levels is smaller than in the pre-sheep ones (this is also true at Byneskranskop and Nelson Bay), suggesting that the herders may have been more casual in their hunting or that they *often restricted themselves to the creatures that could be found within relatively easy reach of campsites or kraals*" (my emphasis). This certainly appears to have been the case at Bethelsklip and /Ai tomas.

There are at present no data from any of the sites under discussion to support the replacement of one type of lithic tradition by another. I have shown how the frequencies

of certain formal tools varies from site to site, with the Sandveld dominated by scrapers while the Richtersveld and Bushmanland contain larger numbers of backed tools. Artefact frequencies also change through time, with the coastal site of Spoeg River exhibiting signs of a replacement of the formal tool component with informal quartz flakes. In this regard, I believe the inhabitants of the site were emulating trends already established a thousand years earlier at south-eastern Cape sites (Appendix 1). Bethelsklip has low percentages of formal tools throughout the sequence, but both Frummel Bakkies and /Ai tomas present proof that a microlithic technology was still being employed until historical times. The latter two sites appear to represent groups living in more remote, arid environments who relied perhaps more extensively on hunting and less on herding. Nevertheless, the technology used in the production of formal tool types remains essentially the same at all the sites under discussion. In other words, there is no evidence for abrupt changes to the lithic tradition practised in Namaqualand during the last 2000 years.

Deacon (unpublished) has suggested that if, hypothetically, there was a situation of conflict between hunter and herders with the introduction of sheep, then it may be possible to see shifts in the norms of artefact manufacture among hunters in terms of:
(a) an increase in both the range and mean size of some tools;
(b) a reduction in the range of artefact types relative to the underlying deposits;
(c) a shift in the type of raw material used for finished tools.

Alternatively, hunters and herders were part of the same cultural stock, with the same basic tool technology, the only difference being an adaptation of the existing tradition where specialized activity demanded it. /Ai tomas is the only site excavated which contained pre-pottery units, but an analysis of the formal artefacts from these lower units provides no indication of any of the changes mentioned above with the first introduction of sheep. Spoeg River, which arguably contains evidence of the gradual shift from a hunter-gatherer existence to one centered on pastoralism, while showing a reduction in the number of formal tools, shows no signs of an abrupt change of the scale suggested by Deacon (unpublished).

Namaqualand could not have remained isolated from the changes taking place in southern Africa during the period under review. We know that metal knives, adzes, spearheads and arrowheads gradually supplanted stone in the toolkit of indigenous inhabitants of southern Africa during the last two thousand years (chapter 3). Wilmsen (1989) as well as Wilmsen & Denbow (1990) have archaeological proof for Early Iron Age habitation of Botswana dating to 1500 BP. We may postulate that extensive trade in metal with Khoisan peoples would have emerged soon after this date, perhaps by as early as 1000 BP. Humphreys (1988) has reported that copper ear-rings were recovered from Type R settlements on the Riet River dated to AD 1060 while a beaten copper fragment from Zaayfontein dates to 900 BP (Pta-3393) (Beaumont & Vogel 1984). While Kinahan & Vogel (1982) believe that a date of AD 1080±100 (SR-46) for four copper beads from a shelter in Namibia may be anomalously early, it would fit with these other dates. According to Wilmsen (1988), iron and copper tools and ornaments were abundant at the Early Iron Age site of Divuyu in Botswana, dated to AD 550, indicating that metal items were available for trade at an early period.

The inhabitants of Bethelsklip appear to have been re-working metal 360±40 BP and the low number of formal tools from this site may be an indication that metal was gaining greater popularity. By contrast, the large numbers of backed points from Frummel Bakkies and /Ai tomas could indicate that the occupants of these sites did not have ready access to metal. We should, however, bear in mind that not all backed pieces functioned as armatures in arrowheads. A microscopic analysis of backed pieces from /Ai tomas by J.N.F. Binneman suggested that they had been used on soft, organic material.

The acquisition of iron would have enabled the Khoekhoen in the northern Cape to manufacture the wooden milk bambus discussed in chapter 3. According to all accounts, they used iron adzes, such as that recovered from the Falls Rock Shelter by Kinahan (1989). A leather pouch containing the iron adze set in a resin handle, together with a string of copper and iron beads and some cowries, was recovered from a pit in the Pastoral phase of occupation at the site, dated to 730±70 BP. Why did the Namaqua start making wooden milk containers when they already owned ceramic containers? It is probable that wooden bowls are more sturdy when milking cattle and have a longer

life than ceramic bowls. However, I have suggested that this innovation was introduced by men with the aim of exerting some control of the domestic economy which was increasingly being usurped by women. I suggest that the absence of adzes in Namaqualand, especially in the post-1000 year period, be attributed to the increasing use of metal adzes in woodworking activities.

If wooden milk vessels were first manufactured after 1000 BP, then prior to this it would appear that livestock would have been milked into clay vessels. It is possible that calabashes or skin bags may also have been used but this is more difficult to trace archaeologically. This implies that the function of ceramic vessels would have changed through time, presumably with social changes taking place within the society. Is there any archaeological evidence for this? Potsherd densities for the period 1900 BP from Namaqualand are low so that vessel shape cannot be reconstructed, while decorated sherds first occur around 1300 BP. Decorative motifs are very standardized throughout the region soon after 800 BP. Namaqua vessels are generally necked, with bosses or lugs and a pointed base. The most common decoration is a row of irregularly spaced vertical incisions which continued in use until the colonial period. I consider below the purpose of the decoration on Namaqua pots.

Vessel shape and decorative motif (the style of the pot) is frequently interpreted as signalling a certain sociopolitical identity to other non-members. This is in fact the hypothesis put forward by Sampson (1988) to explain the variability in decoration observed on the grass-tempered pottery of the Seacow Valley area. Wilmsen (1989:74) has proposed that the highly decorated Early Iron Age ceramic dishes (possibly used for food preparation and serving) "would be invested with associational value as attributes of dominant centres, so that pottery dishes would confer prestige on their possessors. Accordingly, ceramics (especially personal serving dishes) would be desirable prestations in social relations between those dominant elite centers and their rural sources of supply, where local people would prize them as symbols of higher status".

An alternative approach, and one which is favoured in this thesis, is that material culture (such as clay pots) may be used to support the existing social order but, equally, it can be used to "disrupt established relations of dominance" (Hodder 1982b:10). Thus

Sterner (1989) found that pottery decoration was found to signal, not to outsiders, but to members within the ethnic group; and she cautions that we should beware of reading ethnicity into style when it could equally be signalling within-group communication. Ethnographic studies by Hodder (1982a, 1982b) and Braithwaite (1982) among social groups still using ceramic vessels has shown that "pot shapes and decoration are an active component in the interaction between and legitimation of social categories"(Hodder 1982b:171). Furthermore, Hodder (1982b:171) is of the opinion that "pottery decoration may be given specific and detailed symbolic meanings". Although the pots were made by men, Braithwaite (Hodder reply to David *et al.* 1988) has shown that decoration is used by women in Azande society in a "silent ritual discourse which allows women to draw attention to their ambiguous power and protects men from that power". They have observed that pottery which is used in daily encounters between men and women is generally decorated while decoration may not be used when other ideological strategies are employed to maintain the relationship of power.

In view of the ethnohistorical literature presented in chapter 2, one might expect that ceramic vessels made and used by Namaqua women in the context of food preparation, storage and consumption and subsequently presented to the men would, in fact, be decorated. The low percentage of Namaqua pots which are decorated, as well as the remarkable uniformity in decorative motif and vessel shape especially during the post-1000 BP period, suggests that the social and economic contradictions existing in the society were negotiated using other items of material culture and not clay pots.

Could we propose that the decoration was used to signal 'between-group' boundary maintenance? Once again, the fact that relatively few Namaqua pots are decorated would appear to contradict this assertion. By way of contrast, we can compare Namaqua pots with those of the Seacow River Bushmen. Vessel shape appears to be relatively uniform but pots are highly decorated in a variety of motifs. With regard to the manufacture of pottery by hunter-gatherer groups, it is of interest to note that /Xam women were responsible for making pots (Bleek & Lloyd 1911) and it would appear that the procedure was imbued with a certain magical significance (discussed in chapter 4). Following on from this line of reasoning, we may speculate that 'soaqua' groups in

the historical period would have preferred to manufacture their own pots rather than acquire them through trade, not because they were concerned to signal an own identity to outsiders but because they were following specific ritual injunctions relating to their own material culture.

So how do we interpret the sporadic decoration applied to Namaqua pottery? In order to answer this question we need to address the meaning of the decorative motifs themselves. Citing examples from India, the Cameroons and the American Southwest David *et al.* (1988) have suggested that pots are frequently "assimilated to persons" and therefore suggests a comparative study of body decoration and pottery motifs. The red burnish frequently encountered on Khoekhoen pots could be interpreted as an attempt to represent the red ochre applied to women's bodies. With respect to the most common decoration on potsherds in Namaqualand namely circular impressions, it is instructive to note how frequently this particular motif occurs in almost all aspects of Namaqua society. Gordon (Smith & Pfeiffer 1992) reported that the young Namaqua boys in play burnt "small, round speckled spots" on their arms with hot coals from the fire. Red ochre and black soot was frequently applied by Namaqua women as facial decoration and Rudner (1982) mentions that the patterns most frequenly applied consisted of stripes and circles. These common geometric designs are also represented in the very rare rock art encountered in the region. I propose that decoration was only applied to vessels which were used to store valuable commodities, such as specularite, ostrich eggshell beads and, later, iron and copper beads, ground red ochre etc., obtained through trade with groups from further afield. The decoration signalled the prestige acquired by men through these activities.

In chapter 3 I linked the production of red ochre with women and showed how important this substance was in the ritual activities of the Little Namaqua. It is apparent from the archaeological material presented above that red ochre was ground at Spoeg River (pre-1390$\pm$50 BP) and at /Ai tomas post-dating 1980$\pm$120 BP. The presence of large numbers of specularite fragments at the latter site has tended to obscure the ochre remains. Ochre is most abundant in the upper units from this site, i.e., when specularite starts to decline in importance. The source of the specularite used at /Ai tomas is at present unknown. Specularite was mined at Zoovoorby, beyond Keimoes on the Orange

River (Morris & Beaumont 1991) although present information does not confirm that mining occurred some 2000 years ago.

Although historical accounts suggest that both male and female Khoisan groups used specularite, I am inclined to favour the more exclusive use of specularite among males on the basis of analogy with the Korana on the middle Orange River (see chapter 3). It would appear that in areas where both specularite and ochre were readily available, ochre gradually replaced specularite in the ritual life of the community. This would support my contention of the growing authority of women in Namaqua society, which is also reflected in the beads from the sites under discussion.

I have discussed how the external measurements of ostrich eggshell beads may provide a powerful means for identifying a pastoralist site. At Spoeg River only Phase 3 exhibits a mean bead size approaching that proposed for an early pastoralist assemblage. The Bethelsklip beads remain to be measured, while the Frummel Bakkies sample is unfortunately too small for statistical studies. The site of /Ai tomas clearly exhibits an increase in external bead measurements through the sequence, (from 4,2 mm at the base to 5,4 mm near the top) but, more significantly, several beads of greater than 7,5 mm in size are found in the upper units, around 420$\pm$50 BP to 330$\pm$45 BP. In Namaqualand, large beads apear to be a phenomenon which post-dates the introduction of pottery by several hundred years. What is the reason for the increase in bead sizes apparently some time after pottery first appears at a site?

We have already seen that copper and iron beads were curated during the pastoral phase in central Namibia. It is important to note that ostrich eggshell bead numbers decreased from the pre-pottery to the pastoral period by a factor of eight (Kinahan 1989). I suggest that this was because copper and iron beads were replacing ostrich eggshell beads as decorative items on women's clothing. Ostrich eggshell beads at Spoeg River were proportionately greater in number than at Bethelsklip. Only 124 ostrich eggshell beads were recovered from 922 excavated buckets at Bethelsklip, suggesting that they were declining in importance during the post-800 BP period. Beads do, in fact, decrease in numbers from the base of the excavation to the top. It is during this phase of declining numbers that bead sizes increase, which I suggest could mean that their

functions, too, may have changed. I have indicated (with reference to the Klasies burial) that beads strung on cords may have been larger than beads sewn on clothing. When considering eighteenth century Namaqua apparel, as illustrated by Gordon (Raper & Boucher 1988), it would appear that both men and women wore strings of beads around their necks and girdles of beads around their waists. These beads may have been manufactured from ostrich eggshell. Women, we have seen, preferred to hang copper and iron beads from their fore-kaross but this was presumably dependent on the extent of trade with groups further to the north.

The introduction of big beads some time after pottery was first acquired may, in fact, be associated with the increasing status of women which, I have postulated, occurred with the introduction of cattle after 1300 BP. Furthermore, historically, distinctions between Khoekhoen and 'soaqua' groups frequently relate to outward appearance. I have already discussed the more ornate dress affected, especially by Khoekhoen women, and the importance of fat when applied to the body has been stressed throughout this thesis. I therefore relate the use of large beads among the Khoekhoen to the desire to demonstrate physically their affluence to others.

The period 2000 BP to 300 BP saw a number of social changes taking place in Namaqualand. The material culture records the dynamic nature of Little Namaqua society. In the following chapter, I present a model for post-2000 BP occupation of the region.

8. CONCLUSION:A MODEL FOR PASTORALIST AND HUNTER-GATHERER OCCUPATION IN NAMAQUALAND AND WESTERN BUSHMANLAND.

From whom did early Khoe-speaking hunter-gatherers first obtain their stock? What type of structural changes would the society have undergone with the adoption of pastoralism? Why did these first pastoralists leave their 'ancestral hunting grounds' and which route/s did they follow in their migration southward? These are issues which need to be addressed by archaeologists working in Botswana, Zimbabwe and possibly Angola. My research in Namaqualand has not provided any answers to these vexing issues with the exception of the possible routes followed by the early herders into southern Africa. Nevertheless, my review of current research, as well as the theoretical material presented in Chapters 2 and 4, suggests one possible scenario which is briefly sketched below.

Linguistic evidence indicates that hunter-gatherer groups, speaking a Khoe language, acquired sheep and pottery from an as yet unidentified source some 2000-plus years ago and underwent the necessary structural transformations to becoming a pastoralist society. Furthermore, similarities in the the kinship structures of the Khoekhoen and Khoe-speaking hunter-gatherers confirms, says Barnard (1987,1988) that they shared a common origin. Kinahan (1989) has suggested that it was the shaman who facilitated the adoption of livestock in an otherwise 'egalitarian' society, thereby making it possible for the group to 'herd' stock. Are hunter-gatherer societies really as egalitarian as Lee and others have suggested? In chapter 4 I reviewed Wilmsen's (1989) remarks regarding the possibility of surplus accumulation leading to differential wealth and increasing status. Wilmsen (1989) submits that hunter-gatherer society in northern Botswana is not, and never has been, 'egalitarian'. He is of the opinion that a surplus did occur, that accumulation merely took different forms and that it was consequently possible for individuals to acquire more power than others. Smith (1990b) concedes that if certain individuals were able to exert more influence or power than others then

clearly they could have provided the mechanism by which the transformation to pastoralism could have occurred.

With respect to the role played by the shaman in the adoption of livestock by hunter-gatherer bands, Bender (1986) has observed "the trance of the medicine men and women is certainly one of the ways in which social relations are sustained and reproduced but it is also an arena in which individuals can introduce yet legitimise change". If we accept this premise, then we may suggest that livestock may have been acquired in order to fulfil the rain-making rituals of the shaman. Maintaining a small communal herd for ritual occasions would have increased their authority and, since the livestock would have been considered sacred, they would not have been slaughtered on an *ad hoc* basis for their meat. I have tried to avoid proposing that the mere acquisition of livestock (and therefore a change in the productive forces) would necessarily have precipitated a change in social relations as this gives primacy to the economic base.

Smith (1990b:60) has maintained that hunter-gatherers are "incapable of becoming herders in their own right unless fundamental changes take place in their social organisation". I would contend that it is conceivable that various ritual and social (such as gender conflict) factors may have facilitated the adoption of livestock among hunter-gatherers in Botswana some 2000 years ago. With regard to social relations among Kalahari San, Sugawara (1991:113) says "the roles in face-to-face interactions are conspicuously differentiated according to gender, generation, or situational properties" while Wadley (1987:3) adds that "men may not be a dominant class, but they are certainly the dominant interest group". If women in hunter-gatherer societies did not enjoy equal relations with men (Solomon 1989), then this may well have been a potential source of conflict which precipitated the move among certain Khoe-speaking hunter-gatherers toward the adoption of livestock. This is in line with the Materialist contention that "gender conflict is a potential impetus to change in a non-class, non-lineage societies" (Solomon 1989:14). I am particularly interested in the possibility that it may have been changes in the social structure of the group which led to the adoption of pastoralism. This is one aspect of pastoralist studies which deserves greater attention.

Although considerable research has been undertaken among contemporary Kalahari San into the consequences of becoming pastoralists, very little is known of the mechanisms involved. Smith (1990b:65) has postulated that Khoe-speaking hunter-gatherers would have had to be "incorporated as lower-class agro-pastoralists" in order to obtain breeding stock. We may presume on the basis of analogy that hunter-gatherers would have been in contact with pastoralists for some time before reaching the point where they may have taken the decision to start herding animals. Wilmsen (1989:192) has suggested that the early hunter-gatherers and pastoralists "were distributed in small local residence units". Furthermore, "given the economic and social scale of their lives, bilaterality was probably advantageous". I would agree with Ingold (1980), however, that instead of ascribing bilateral kinship and unilineal descent to adaptations to environmental conditions we should instead be considering whether they do not derive from the "character of property relations"(Ingold 1980:199). The transformation from a hunter-gatherer society to one based on pastoralism clearly coincided with changing perceptions of animals as property, initially perhaps the property of the shaman and then as the property of individual families.

Since Klein (1986) has suggested that early Khoe-speaking pastoralists herded sheep for approximately 700 years before cattle became important in their economy, we need to consider whether the acquisition of sheep would have resulted in reduced mobility of the essentially hunter-gatherer band. According to Cashdan (1984:320), goats were relatively easily incorporated into the hunting and gathering economy of the //Gana of Botswana. They have continued to be hunter-gatherers but goats have been successfully incorporated into their subsistence strategy. The reason for this is that the mobility of the goats would allow them to be integrated within the hunter-gatherer economy. The goats provide milk, skins for clothing and meat on ritual occasions or when the animal dies of natural causes. "The //Gana goats, by reason of their mobility, are akin to wild herd animals, and as a result their effect on the environment appears to be slight" (Cashdan 1984:324). She believes that goat husbandry would have been able to coexist with hunting and gathering in the Central Kalahari for some time; cattle keeping, on the other hand, would have resulted in irreversible environmental changes. If hunter-gatherer groups in Botswana today have little difficulty in herding livestock, then it is reasonable to suggest that hunter-gatherer groups in the past may have herded

sheep in small numbers as a first stage in the process of becoming pastoralists. Not all hunter-gatherers, it appears, slaughter their recently acquired stock with no thought for the future.

We are able only to speculate on how the acquisition of livestock would have affected hunter-gatherer gender relations some 2000 years ago as current accounts (Brooks *et al.* 1984) are concerned with transformations to pastoralism within a wage economy. However, since each individual plays a vital role in the survival of the band one can hypothesise that the acquisition of sheep would have placed additional stress on the available labour. Either some men would have had to forego hunting or some of the women would have cared for the stock so that the men could continue with their pursuits. Considerable value is attached to the male contribution to the diet in hunter-gatherer societies. The sharing of game contributes to the social unity of the group, while plant foods do not have a similar value. I would postulate that the acquisition of sheep would have necessitated some type of communal reponsibility for the herds until at least a viable number had accumulated. Wilmsen (1989:242) has shown how families in Zhu homesteads (bands) combine stock in order to establish a viable herd; similarly, we may postulate that early pastoralists may have combined their herds for stock management purposes. The differential acquisition of stock among contemporary Zhu and Nama families suggests that only after herds had grown to viable numbers would each family have taken responsibility for its own stock.

What would have precipitated the southward movement of the early pastoralists? While I reject simple environmental explanations such as a decrease in rainfall, Bonte (1979) has shown that unfavourable environments are often the source area for pastoralist expansion. This is because unequal production, while at the same time allowing for equal access of all members of the group to the communally held means of production, often results in territorial expansion. Ingold (1986:24), too, has posited that "the transition to pastoralism is triggered by a situation of scarcity", i.e., he takes an cultural ecological view.

However, I believe that there is little evidence that severe environmental conditions would have precipitated a southward movement of livestock, as Iron Age herders appear

to have been established in Botswana for approximately 1500 years without experiencing similar environmental constraints. Elphick (1985) has suggested that early pastoralists expanded from Botswana in order to seek new pastures, as access to a regular milk supply would have led to a rapidly growing population. However, this explanation also appears unlikely, since we would then expect to recover large domestic faunal samples from the 2000 BP period in Botswana: evidence of a very successful Later Stone Age pastoralist society compelled to move elsewhere because of the needs of their animals. If, as all the evidence suggests, sheep was initially only a minor accretion to the hunter-gatherer economy, it hardly seems possible that this would have led to migrations in excess of 2000 km. This is one area in which migration theory requires further research.

I consider below evidence from Namaqualand for a route into southern Africa followed by early hunter-gatherers turned pastoralists. Palaeoenvironmental indicators from the Walvis Bay area in southern Namibia as well as from Spoeg River Cave on the Namaqualand coast suggest that the region experienced marginally cooler and perhaps wetter conditions ca. AD 100 to 200. This may be part of the reason for the re-occupation of the area after a substantial hiatus as delineated in the previous chapter. Our earliest Holocene dates (within a single standard deviation of one another) from Namaqualand are from two sites some 500 km apart. I consider /Ai tomas first, since it is located closer to the reputed centre for domestic stock and pottery, namely Botswana.

There is archaeological deposit predating the unit dated to 1980$\pm$120 BP at this site but preservation in these lower units is extremely poor and the artefacts themselves do not appear to be in primary context. Nevertheless, their presence indicates that the site, situated in an extremely arid area of the Richtersveld, some 50 km from the coast and 30 km from the Orange River, was occupied even before livestock and pottery were first introduced to the region. There appear to be no changes to the lithic toolkit with the introduction of these elements and the occupants continued to hunt klipspringer as in earlier times. It is possible that sheep became a minor accretion to their economy, as goats do today among the //Gana discussed above. Nevertheless, isolated fragments of specularite as well as the occasional decorated ostrich eggshell fragment, indicate that

they had established a tenuous link with people from outside their valley, perhaps with individuals as far afield as the middle Orange River. We may speculate that the river saw substantial trading along its length even around 2000 years ago and that the inhabitants of /Ai tomas also benefited from this. They were therefore placed in a favourable position to acquire livestock, albeit in small numbers, as well as pottery from early pastoralist groups probably travelling down the length of the Orange River toward the Atlantic Ocean. We follow these groups on their migration, returning to /Ai tomas again below.

Spoeg River Cave on the Atlantic coast was first occupied by people with sheep and pottery during a period slightly cooler and wetter than that which followed. During this initial phase of occupation (1920±120 BP) the inhabitants of the site exploited both mussels and limpets in equal numbers but did not collect crayfish or plant foods. All these factors would appear to suggest that these early inhabitants of the Namaqualand coast were not familiar with the local coastal resources. This scenario is consistent with the view expressed by Van den Berghe (1981), namely, that groups moving through a new region are at a disadvantage, with respect to a knowledge of the local environment as well as socially. They are generally dependent on the goodwill of the indigenous population and if the group is small it may be assimilated into those of the indigenous residents. In my opinion hunter-gatherer groups resident in Namaqualand had more to offer the newly arrived Khoe-speaking pastoralists than merely "unskilled labour" (Smith 1990b:57). They also had an intimate knowledge of the local environment as well as established contacts with other groups, all of which would have been of great value to herders moving fairly rapidly, into an unfamiliar region.

However, I have already indicated that Namaqualand was probably only sparsely populated in the pre-2000 BP period and pastoralist groups moving through the region are unlikely to have encountered many local groups. This observation appears to be confirmed by the almost total absence of evidence for human occupation from numerous small rockshelters sampled in the Kamiesberg. If Namaqualand was occupied pre-2000 BP by large numbers of hunter-gatherer groups, then they do not appear to have retreated into the mountains with the arrival of the first pastoralist groups along the coastal plain, as has been suggested for the western Cape (Parkington *et al.* 1986).

The largest number of sheep NISPs (22, with a MNI of 2) were recovered from unit Patella (from two square metres) suggesting that their impact on the local environment is likely to have been minimal. They are clearly not likely to have been competing with the larger herbivores for vegetation. In fact, despite abundant historical data for the presence of large mammals in Namaqualand, they do not appear to have been hunted on a sustained basis by any of the occupants of the sites examined. The faunal remains from sites immediately post-2000 BP suggest that their occupants were subsisting primarily off shellfish and small bovids. There is also a lack of data to indicate that they were utilizing large amounts of plant foods at this period, despite the excellent preservation of organic material at Spoeg River.

During these initial stages men would have been able to continue hunting but women would not have been able to make their contribution to the diet because they were ignorant of the available plant foods. They may have resorted to shellfish collecting as an abundant and easily accessible resource. During this period, I suggest, women's status decreased relative to what they had enjoyed previously. I would suggest that during the period 2000-1600 BP women may have been collecting shellfish instead of gathering plant foods but that through time, with their (women's) increasing involvement with herding, men may have resorted to collecting shellfish. The switch from mussels to limpets (which require greater dexterity to harvest), as well as the exploitation of crayfish commencing in Phase 2, suggests that the gender of the individuals undertaking the harvest may have changed. We know that by recent times Topnaar men were collecting shellfish on the Namibian coast (Budack 1977).

Women's status became enhanced only when they were able to control certain aspects of the economy. It was only in the post-1300 BP period that female control over the products of the herds placed them in a position of considerable authority. Archaeological samples of domestic stock from the 300 BP year period suggest that flocks were being managed to maximise milk production and that the formative Khoekhoen were experiencing a certain degree of economic stress, which may well have encouraged the exploitation of a greater range of plant foods. Spoeg River Cave was abandoned soon after 1390$\pm$50 BP. The reduction in grasses around the site and increasing summer aridity would have made it more difficult to graze sheep during the

early summer months and the possible acquisition of cattle around 1300 BP, as has been suggested for the northern Cape (Klein 1986) and the western Cape (Klein & Cruz-Uribe 1989) would have necessitated a move to more favourable areas such as the Kamiesberg mountains. During this final stage of occupation there is again a brief switch to mussel collecting; crayfish sizes are down after extensive exploitation, large numbers of plant foods are collected and stored for later use. There is a decrease in the range of animals hunted: faunal remains consist primarily of seal, dassie and sheep. There are very few formal tools in the lithic assemblage and artefacts are predominantly made on quartz. Pottery is also decorated for the first time with horizontal lines; in my opinion, the decoration of domestic utensils during this period is a manifestation of changes in the social structure of the group co-incident with the introduction of cattle to the economy. Increasing production of beads suggests more extensive periods of occupation at the coast, while a single piece of specularite indicates the beginnings of more extensive trade networks with groups further afield. Ostrich eggshell bead sizes during this final phase fall within the range of early pastoralist sites observed elsewhere. By 1200 BP, changes to the social and economic structure of the group had finally crystallised into a form similar to that of the Little Namaqua Khoekhoen. The material culture signature of the group is a manifestation of this.

Increasing summer aridity on the coastal plains and the acquisition of cattle would have been one of the reasons for a move to areas with better grazing and more permanent standing water. More importantly, while sheep may have been the communal property of the band and managed as such, cattle are more likely to have been individually owned and herded. The emphasis in stock management would have been placed on individual families, who would have resided further apart. Caves and rock shelters would no longer have been suitable locations. The presence of cordage and fragments of *Scirpus* spp. reeds from the final units at the site suggest that the inhabitants were in a position to construct matjies huts which would have facilitated a move from caves into the open. We may postulate that Die Kelders and Boomplaas were abandoned by pastoralist groups for the same reason at around this period.

I suggest that during the post-1200 BP period the unequal accumulation of stock in a society which emphasised the principle of egalitarianism would have placed considerable

stress on social relations. Surplus animals were loaned to less affluent individuals according to the well-established principle of reciprocity and a mechanism set in motion which allowed for the reproduction of the society. The structural changes which resulted in the emergence of a Khoekhoen society had their origins in the acquisition of cattle around 1400-1300 BP. Cattle, with their greater water and pasture requirements, would have been in competition with the larger herbivores. Cattle also have greater labour requirements and by now sheep numbers had increased considerably. The fact that pastoralists were rather thinly spread over a large landscape would have encouraged clan or lineage endogamy or prescriptive cross-cousin marriages. Contracting marriage alliances with members of tribes separated by several hundred kilometres of inhospitable terrain would not have brought significant economic benefits. By concentrating wealth within several lineages, a system of opposing lineages would have been established which would lead to the expansion of the group and the incorporation of non-herders at the periphery.

At present we have no data regarding the period 1390±50 BP to 800±50 BP in Namaqualand. Bethelsklip in the Sandveld was occupied for the first time just before 800 BP. Both Bethelsklip and /Ai tomas are situated next to large boulders, suggesting that these localities served as an important focus in the landscape. Kasteelberg, in the south-western Cape, is also located next to large granite boulders on a small kopje: a location which is very similar to that preferred by herders in the Leliefontein Reserve today. There are some tentative lines of evidence from Bleek (1864:64) and Hahn (1971:94) which suggest that the Khoekhoen may have originated in a rocky region and consequently choose similar localities for their settlements.

Bethelsklip has an upper date of 360±40 BP which has been calibrated to AD 1492-1643 (Vogel pers. comm.); i.e., the latter date is immediately prior to the arrival of the first Dutch governor at the Cape, van Riebeeck. The significance of the site is that there are historical accounts of Little Namaqua groups living nearby in 1819 (Webley 1982, 1984, 1986). According to Shaw (unpublished journals), chief Wildschut and his followers were scattered around the rocks and bushes in the vicinity of the boulders during the winter months (June to October). I postulate that by 800±50 BP pastoralist groups in the area would all have been using matjies huts and hence we are

unlikely to find evidence of domestic occupation at the rock itself. However, the presence of a dung layer indicates that the site did function as a kraal for a period and we may infer that a range of activities would have been performed in the shelter of the rock.

While cattle have not been conclusively identified from the site (though Thackeray (pers. comm.) considers it to be a possibility), sheep and goat are present. The goat remains from Bethelsklip date to between 800±50 BP and 360±40 BP, and since they have not been recovered from other 'herder' sites in the Cape Province, it would appear that it was only the Namaqua who were herding them in any number in the pre-colonial period. We can surmise that they could only have been obtained through trade with Briqua/Ba-Thlaping/Tswana) groups in the northern Cape. Domestic stock do not, however, represent the bulk of the diet; the majority of the faunal remains include various categories of herbivores, including springbok and steenbok, as well as dassie and tortoise.

Plant foods, notably the corm casings of two types of underground bulbs, were recovered from units WA and BL which were dated to 360±40 BP. It is possible that the site is too exposed for the preservation of organic material in the lower units; however, it is significant that plant food remains were also recovered from /Ai tomas and Rosh Pinah from the same period. Bethelsklip does not, however, merely represent the continuation of the chronological sequence established at Spoeg River. The basal layers of the site contain large numbers of artefacts and many formal tools, substantially more than the upper units of Spoeg River. However, total formal tools amount to only 0,7% of the lithic assemblage, which may be compared to 0,9 % for Phase 3 at Spoeg River. In excess of 90% of the lithics are of quartz.

Pottery numbers are low in the basal units but increase toward the top. The typical decoration of vertical incisions appears in units dating to approximately 800±50 BP. It remains the most common decoration on ceramics in Namaqualand until historical times. Furthermore, necked vessels, lugs and pointed bases also make a first appearance around this period. A number of fragments of shell of marine origin were recovered from Bethelsklip, indicating that the inhabitants did have contact with the coast or with

coastal groups. Certainly, there is no mention that any of the Namaqua groups from the Kamiesberg region ever travelled to the coast on a regular basis during the colonial period. The historical accounts do suggest that small groups of people, some with livestock, did subsist along the coast, perhaps on a seasonal basis. Individuals were observed to move between the coast and interior; however, (Appendix 2) it is likely that the marine shells at Bethelsklip would have been brought to the site by individuals moving between these areas rather than representing seasonal movement of the entire group to the coast.

There are very few unfinished ostrich eggshell beads at Bethelsklip and the total number of beads is proportionately low. We may postulate that either beads were acquired through trade with other groups or that they were manufactured at the summer aggregation sites on the Kamiesberg (Webley 1984, 1986). Since bead size profiles do not differ from those at other sites in Namaqualand for which evidence of manufacture does exist, we may reject the first proposal. Since Bethelsklip dates to between AD 800±50 BP and 360±40 BP it is conceivable that the inhabitants of the site were largely wearing copper and iron beads, hence the low numbers of ostrich eggshell beads. The presence of glass trade beads is proof that the inhabitants of the site were part of the extensive trade network in operation throughout the northern Cape. Further proof of Bethelsklip's role in the economy of the region is that of several pieces of oxidised iron recovered from a hearth in BL, dated to 360±40 BP. There was no evidence of a furnace and in my opinion the iron fragments merely confirm that the occupants of the area were reworking metal items obtained through trade with groups further to the north.

The presence of goats, oxidised metal, trade beads, etc., are clear indications that the inhabitants were travelling as far afield as Namibia and the northern Cape to trade with various groups. Men are likely to have gained added prestige through their involvement in trade with luxery items such as beads, specularite, etc., which may well have been stored decorated vessels. The greater involvement of women in livestock management is reflected in the folklore of the Namaqua, in their control of the domestic economy and in their social prestige. Women indicated their enhanced authority through their jewellery and the application of ochre to their persons.

The final stages in the occupation of Bethelsklip coincide with the upper units of /Ai tomas in the Richtersveld, to which we now return. Dates of 420±50 BP from Area 1 and 330±45 BP from Area 2 have been obtained. It is conceivable that a hiatus exists between 1980±120 BP and these upper dates although this is not supported by an accumulation of sterile deposits. It is more likely that the site was only sporadically occupied during the last 2000 years. During the final phases of occupation of the site the inhabitants hunted less klipspringer and concentrated more on smaller food packages such as dassie. Sheep are still present, but in small numbers: they only increase toward the final stages of occupation at the site. An unusual feature of the site is the pits which generally contain mainly faunal remains. These occur in both Areas 1 and 3 and which date between 1980±120 BP and 420±50 BP. One pit contained the complete skeleton of an adult and a juvenile klipspringer; however, the majority of the pits were filled with the scattered remains of a number of individuals. This manner of waste disposal is quite unlike that practised by contemporary herders in Namaqualand.

Corm bases and seeds point to a spring and early summer occupation between the 15th and 17th centuries. It is interesting to note that Sievers (1984) also obtained a date of 330±45 BP (Pta-3579) from a plant-rich layer at Rosh Pinah, which suggests that a period of more intensive plant utilisation in this part of the north-western Cape occurred during this period. Both faunal and plant remains suggest an intensification in the exploitation of local resources at the expense of slaughtering domestic stock. This may indicate a disruption of established economic systems at this period, perhaps related to trade practices or severe droughts. An increasing reluctance to slaughter stock would have necessitated a shift to a greater reliance on collecting plant foods.

The lithic toolkit at /Ai tomas, dominated as it is by backed pieces, remains largely unchanged except in Area 2, where the decline in formal tool numbers may be a function of the nature of the deposit; i.e., a discard area. There are very small-scale changes in the external diameters of ostrich eggshell beads, though certainly not of the scale noted at Spoeg River. Large numbers of both unfinished and finished beads at the site, as well as a broken grooved bead stone, are proof that the inhabitants were engaged in this activity. Mean exterior bead diameters increase slightly through the

sequence but beads greater than 7,5 mm in external diameter occur only in the upper units.

Finally, with respect to pottery, there are very few fragments dating to 1980±120 BP. Frequencies of sherds as well as decorated fragments peak around 420±50 BP and 330±45 BP, but none of the latter were recovered from the lowest units. It is interesting to note that peaks in pottery numbers coincide with increases in those for ostrich eggshell fragments. The typical ceramic motif of Namaqualand, consisting of circular incisions around the vessels rim, occurs only in the final stages of occupation of the site.

These economic and technological factors suggest a conservative society, but this assumption is belied by an abundance of specularite, decorated ostrich eggshell as well as numerous marine shell fragments. Up to 30 fragments of specularite were recovered from some units and the presence of several grindstones suggests that it was being ground up for body pigments. There is a decrease in specularite in the upper units, coinciding with an increase in ochre. The decorated ostrich eggshell fragments predate the 1980±120 BP units and continue up to 330±45 BP. There were at least two flask mouths, one decorated, in the sample, which may imply that the decorated fragments may all be derived from ostrich eggshell flasks that were presumably used to store water. Complete marine shells in the upper units were probably strung on clothing or in the hair but the function of numerous fragments of limpets is not known. They do not appear to have been worked into pendants but may have been used as eating utensils.

The inhabitants of the site were clearly obtaining their specularite from further afield, perhaps from as far as the northern Cape. Which items did they barter in order to obtain the specularite? Perhaps ostrich eggshell beads? Or klipspringer and dassie skins? Or honey? Nevertheless, various factors such as the decorated ostrich eggshell pieces, the small sizes of the ostrich eggshell beads, the high frequency of backed artefacts, etc., suggest that their subsistence as well as their material culture more closely resembles that of hunter-gatherer groups. However, during the final phases of occupation of the site, greater emphasis on sheep, changes to pottery decoration and an

increase in bead sizes suggest that the occupants were in the process of becoming pastoralists or were in greater contact with pastoralist groups. It is difficult however to determine the point at which hunter-gatherers become herders, so Kinahan has remarked the "practical separation of hunting and pastoralism in the archaeological record is made difficult by continuities in technology and subsistence" (1989:69).

/Ai tomas differs from sites such as Bethelsklip in its greater formal tool component. It also contains four times the number of beads recovered from Bethelsklip, although a considerably smaller area was excavated. Decorated ostrich eggshell pieces and the wide range of raw materials are other important differences. The specularite, decorated ostrich eggshell and the fragment of bored stone would all confirm that this site, situated near the Orange River, formed part of a more extensive sphere of contact involving the entire middle Orange River area. The three radiocarbon dates from /Ai tomas suggest that the occupation of the site may have been brief and intermittent.

The final area investigated during my research was western Bushmanland. Shaw (unpublished journals) first visited the Kliprand in 1817. He met with 'Bushmen' on two, but possibly three, occasions. The first was when he was travelling through the region and the 'Bushman' he interviewed said he was from behind the Orange River. He had with him his bows and poisoned arrows as well as two dassies which he had just caught. He told Shaw that he had also shot lion, two 'tygers' and a hippopotamus in the past. Further on his travels, Shaw came across three 'Bushmen' families dining on the calf of a gemsbuck. Later, one of the 'Bushmen' came riding on an ox to visit Shaw and his party at their outspan. Shaw questioned him closely and in conversation the 'Bushman' said that their group did not always live together, sometimes they were scattered, following the gemsbuck from place to place, and sometimes they were together. They did not trade in skins as they were frequently forced to consume these when the game disappeared. "Sometimes we get a few beads from the people by the great river when they cross our land". As to their territory, he said that the fountain they were camping at was in their portion; there was another tribe between them and the great river (Orange River).

The historical accounts confirm the existence of two 'ethnic' groupings in the region, the Little Namaqua on the Kamiesberg and the 'Bushmen' on the Kliprand during the early nineteenth century. However, the question of the true identity of the 'Bushmen'is clearly more complex. We know that the 'Bushmen' had on several occasions raided stock from the Little Namaqua during Shaw's sojourn as missionary in Leliefontein. While they may have consumed the stolen stock, it is also clear from the passage above that some of the animals were kept for transport. This suggests that these 'Bushmen' groups were familiar with caring for livestock. Equally, my informants in Leliefontein reported moving into Bushmanland after the summer rains so that their cattle could utilise the grass. Historical information indicates that both groups occupied this region on a seasonal basis. Linking a particular 'ethnic' group to the archaeological material distributed around the pans in western Bushmanland may no longer be possible, although the data I present below suggests that we are able to identify cultural groupings which appear to differ from each other.

Frummel Bakkies in western Bushmanland is one of numerous pan sites with evidence of past human habitation. Five areas were sampled but only one dated. Areas 1, 2 and 5 are difficult to characterise because of their adiagnostic potsherd samples and are not considered here. Area 3 is significant because of the large numbers of potsherds (508), none of which was decorated, and the fact that large numbers of these sherds contained grass temper. Although there were relatively few formal artefacts associated with the sherds they were almost all backed microliths. The fourteen formal artefacts comprised 2,5% of the lithic total and backed flakes and blades amounted to 85% of the formal assemblage. I would tentatively suggest that Area 3 resembles Beaumont's Swartkop Industry recovered from eastern Bushmanland (Beaumont pers.comm.). This industry has a backed flake and blade component amounting to more than 60% of the formal total while scrapers and adzes are less than 20% and segments (as in Area 3) are absent. Furthermore, the Swartkop Industry contains ceramics with no incised or impressed decoration and the temper of the sherds is generally grass. Beaumont has also recovered iron fragments from this industry (dated between 700 and 500 BP). If, on typological grounds, we link Area 3 with sites from eastern Bushmanland dating to the 13th century, then it would appear that it predates Area 4, located a few hundred metres from it.

Area 4 was dated to 160±45 BP which, when calibrated indicates an age of AD 1675-1752, or 1794-1894 or even AD 1922 (Vogel pers. comm.). The last date is considered unlikely because there is no evidence for European artefacts on the site. The presence of lithics and pottery suggests the period around AD 1675-1752 to be most likely. The formal tool component amounted to 2,2% of the lithic total and backed flakes and blades comprised 63% of the formal assemblage. Scrapers were 15% of the formal toolkit and one segment was recovered. Furthermore, the ceramics from the site contain virtually no grass temper and at least ten sherds (5%) are decorated. The decorative motifs resemble those of Namaqualand proper and suggest that the inhabitants had ties with that area. The lithic artefact concentration in Area 4 is greater than Area 3 (17,6 artefacts per square metre as opposed to 7,7) while Area 4 contains unfinished ostrich eggshell beads. This suggests that Area 4 was occupied for longer than Area 3 (or possibly re-occupied on a number of occasions). The extent of the artefact scatter is also greater in Area 4 which may indicate a larger group at the site.

The artefact scatters in Areas 3 and 4 differ from each other, although the distinctions are not great. A lack of temporal control for Area 3 hinders effective comparisons; nevertheless, it is possible to suggest two different groups resident at the site, one with links to Namaqualand while the other appears to have had ties with eastern Bushmanland.

To recap briefly: just as contemporary hunter-gatherers exhibit a variety of adaptive strategies with respect to the presence of a more 'powerful' economic group so too, I suggest, did early hunter-gatherer groups respond to the arrival of the first pastoralist peoples in Namaqualand some 2000 years ago. Some may have engaged in a patron-client relationship, some remained hunter-gatherers while others oscillated between hunting and herding. The first pastoralist groups to arrive in the area were merely Khoe-speaking hunter-gatherers with stock and it is initially difficult to distinguish between them and the indigenous hunter-gatherers of the region. A separate Khoekhoen identity emerged as a *consequence* of several generations of interaction between hunter-gatherer groups and those preferring pastoralism. This thesis has therefore followed the line that it would have been possible for hunter-gatherer groups to undergo the structural changes necessary to become pastoralists.

The transformation to the type of pastoralist society observed by European travellers in the seventeenth century occurred over a period of many hundred years and these societies may only have exhibited true pastoralist trappings as late as 1200-1000 BP. I have postulated that this transformation to a pastoralist society was effected by the changing role of women in the society, largely as a consequence of the position Namaqua men assumed in trade with groups further north from approximately 1000 BP. Although women controlled the domestic economy, men still dominated society in the political and ideological arena. This dominance is "not something which is given but has to be constantly re-negotiated and re-created" (Moore 1986:170). It was achieved through the male institution of rules and taboos regarding female behaviour. It was further supported by the prestige which men acquired through communal hunting drives. We may also surmise that it would have been men who were responsible for metal-working. The contradiction which is likely to have arisen between the sexes was therefore not suppressed but had to be constantly re-negotiated.

With respect to relations between the Khoekhoen and the indigenous inhabitants of the region, it is my opinion that considerable assimilation probably took place in the period 2000 to 1600 BP. To paraphrase Klein (1984), I believe that a mix of population replacement, assimilation and acculturation took place. The acquisition of cattle, however, would have tilted the balance of relations between the groups in favour of the Khoekhoen and some hunter-gatherers may well have become clients (in order to acquire stock) while others may have moved further afield to maintain a degree of autonomy. I have further suggested that the Khoekhoen may have employed 'soaqua' clients, rather than making use of stock alliances, during periods when the social value of their livestock decreased in importance or during periods of territorial expansion.

Relations between these groups are likely to have fluctuated during the centuries, with factors such as increasing trade with Iron Age groups in the northern Cape and Botswana influencing the balance of power. Hunter-gatherers in the central Orange River area were placed in a position to act as middle-men in the exchange network between Tswana and Namaqua groups and would have benefited from this through the acquisition of their own herds. By the seventeenth century large numbers of 'soaqua' were living on the fringes of Khoekhoen society. Under favourable conditions they

could be assimilated, while during periods of competition or stress Khoekhoen individuals could be banished or outlawed and become 'Bosjesmen'.

We may postulate that the arrival of the Dutch would have seriously influenced well-established trading networks and devalued both metal and livestock in the process. Khoekhoen groups are likely to have preferred trading directly with the Dutch instead of dealing with the Tswana many thousand kilometres away. In addition, the Dutch could offer more desirable items such as tobacco, arrack and glass beads as well as metal. Marks (1972) has observed how the fighting (and raiding) among Khoekhoen groups at the Cape may well have increased as a result of rivalry over trade. Hunter-gatherer groups, we may assume, would also have been seriously affected. Cut off from their lucrative position as partners in the trading market, they would have been placed in a precarious position. It was European intervention in the wider economy of the sub-continent which precipitated the clear separation between pastoralist and hunter, giving rise to ethnic distinctions and increasing competition for dwindling resources. The term 'soaqua', previously an "epithet of origins with economic connotations" (Wilmsen 1989) gave way to 'Bosjesman' a term referring to a mass of dispossesed people grouped together by colonial authorities.

Central to this thesis has been the significance of material culture in terms not only of the 'ethnic' information it may contain, but also its importance in structuring within-group relations. This approach may improve our understanding of archaeological material from post-2000 BP sites in other parts of the country such as the western Cape. Smith *et al.* (1991), for example, have asserted that they are able to distinguish between the cultural signature of herders and hunter-gatherers on the basis of lithics, pottery decoration, bead sizes and faunal assemblages. Their research suggests that hunter-gatherers at the site of Witklip in the pre-1000 BP period obtained their ceramics from their pastoralist neighbours while only gradually emulating their preference for larger ostrich eggshell beads. Hunter-gatherers at the interior site of Voëlvlei, however, manufactured only large beads during the last 500 years of occupation at the site, but either acquired or manufactured pottery, which Sadr & Smith (1991) have characterised as 'soaqua'. Smith *et al.* (1991) appear to be tracing clear temporal changes in the manipulation of material culture among hunter-gatherers during the last 2000 years,

which probably related to changing social relations within their society. Smith (1990b:66) has asserted that after "fifteen hundred years of association between Khoi and San groups the separation was still maintained", but these claims are not unambiguously supported by the material culture items from his excavations. In my opinion the approach taken in this thesis, namely, an examination of material culture and its role in structuring within- and between-group relations, could considerably enhance our interpretation of Khoekhoen/hunter-gatherer relations.

In conclusion, I should like to repeat a remark made earlier, namely, with respect to historical Namaqua groups it is my opinion that it was not the loss of their stock as such which brought about the downfall of the society. Rather, it is the changes brought about within the social structure of the society when pastoralists invested in beads and tobacco rather than using surplus stock to establish stock associations. A similar conclusion was reached by Kinahan (1989:165) with respect to the pastoralists of Namibia, namely, that "the collapse of the pastoral economy was the direct result of trading livestock as a commodity". I do not, however, suggest that the Khoekhoen became impoverished because they bartered away their cattle for 'mere baubles' (Marks 1972:80) but that they deliberately chose to exchange their surplus stock for marketable commodities (copper and iron) in order to circumvent illegal European trade. In my opinion, the conflict generated by the power appropriated by women in Namaqua society, was outwardly expressed in their "insatiable" demands for trade beads and copper jewellery which necessitated further excessive trading in livestock. These copper and iron beads were worn primarily by the women which enhanced their status at the expense of their menfolk and posed a further threat to the stability of the society. Ironically, the gradual decline of the pastoralist economy and the opportunites presented by the Western wage market resulted in increasing male power and authority at the expense of the women.

With hindsight, it is apparent that Chief Wildschut anticipated the outcome of Dutch expansion when he approached Barnabas Shaw with the request that Shaw establish a mission station in the Kamiesberg. The communal 'reserves' in Namaqualand have allowed the descendants of the Little Namaqua (and others) to maintain limited access

to pasture lands, thereby ensuring them a measure of autonomy as well as control over their future.

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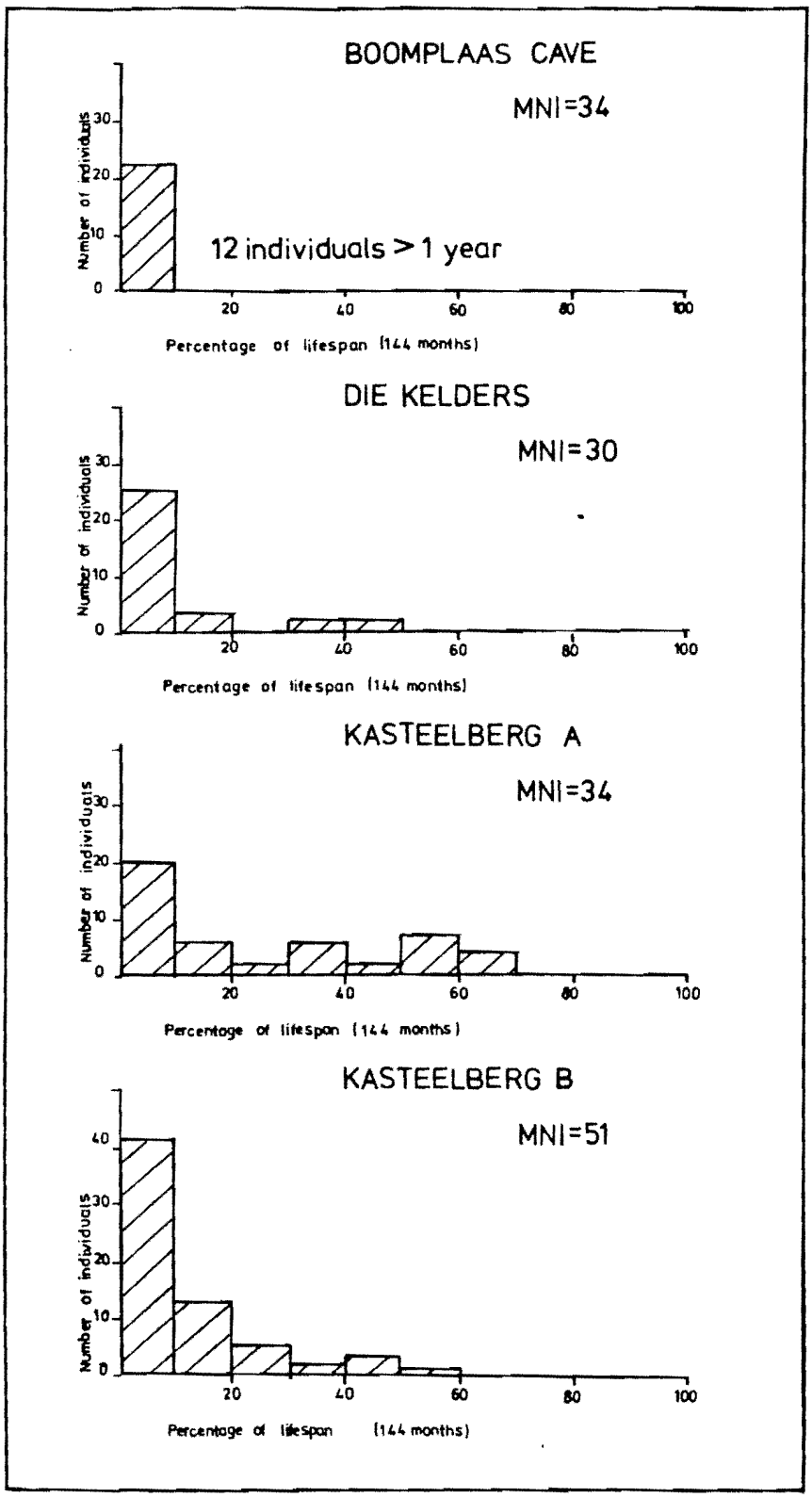
APPENDIX 1

Graphic presentation of sheep mortality profiles from Boomplaas Cave (after von den Driesch & Deacon 1985:Table3) and Die Kelders and Kasteelberg (after Klein & Cruz-Uribe 1989:Fig.8).



APPENDICES ON ARCHAEOLOGY AND HISTORY

In these appendices I present more complete descriptions of issues touched upon in the main body of my thesis. Appendix 2 provides additional data concerning the utilisation of informal lithic artefacts among coastal populations during the last 3000 years. I refer to this discussion in chapter 1 and again in chapters 7 and 8. Appendix 3 examines the history of the Little Namaqua Khoekhoen in greater detail. It should be read in conjunction with chapter 2.

APPENDIX 2: REVIEW OF THE CERAMIC LSA

There has been a remarkable reluctance among stone-age pastoralist researchers to address the issue of whether or not pastoralists (Khoekhoen peoples) manufactured retouched stone artefacts. The historical accounts are almost certainly unreliable and slanted (Klein 1986; Ritchie 1989); however Rudner (1979), in a review of the early documents, concluded that both 'Bushmen' and 'Hottentots' are reported to have used flaked stone implements. Unfortunately, these accounts do not specify whether the tools were retouched or not.

The archaeological record confirms that pottery occurs in association with both retouched and unretouched stone tool assemblages dating to within the last 2000 years. Sampson (1974) recognised a Smithfield Complex, a Ceramic Wilton and a Strandloper Complex dating to this period. The Smithfield, characterised by long end-scrapers, and the Wilton are part of a linear development of the same tool manufacturing industry (Wadley 1979). The Ceramic Wilton retains the microlithic toolkit of the pre-ceramic period, although formal tool morphology and frequencies do vary considerably. The Strandloper Complex occurs at coastal sites and is characterised by large unretouched flakes and flaked cobbles and very few formal tools. Some sites, in fact, contain no formal tools at all. There are two reasons why the term Strandloper should be abandoned. Firstly, as Sampson himself concedes, 'Strandloper' has in the past been applied to both microlithic and non-microlithic assemblages from coastal sites. More

recently, Wilson (1990) has reviewed the use of the name 'Strandloper' and its application to both people and archaeological sites and has concluded that the name is misleading in its implications. He adopts the term 'post-Wilton' which, as I shall discuss below, clearly links it to both the Wilton and the ceramic-Wilton and is therefore more appropriate.

How do we, however, explain the existence of an informal 'post-Wilton Complex' along the coastal margins ? H.J.Deacon (1976) has suggested that the dominance of small convex scrapers at inland sites, but their relative paucity at coastal sites, be linked to the replacement of plant food gathering and processing by shellfish gathering. This explanation, however, does not adequately address the issues under discussion. Microwear studies do not suggest that scrapers are used in plant food processing either; their absence from coastal sites would appear to suggest that coastal populations were not making skin clothing. The suggestion that coastal sites represent a seasonal or activity variant of other coastal sites containing Wilton assemblages was rejected by Sampson who asserted that the same range of faunal material occurred at both sites. He proposed that "the differences in artifact content are more likely to reflect two distinct stone-flaking traditions than represent two independent populations". This view has been criticized by Wilson (1990); he points out that "different flaking techniques would be employed in the manufacture of the retouched microliths that are characteristic of the Wilton and the crude flakes and flaked cobbles....that are a common feature of shell middens" (1990:88).

Can we hypothesise that it was the pastoralists who first introduced the post-Wilton assemblages to the coastal margins? Not unless we believe that pastoralists were present along the Cape south coast 3300 years ago. It was at around this time that substantial changes occurred in the material culture assemblage of Nelson Bay Cave (Inskeep 1987:282). Small microlithic artefacts are replaced by a large quartzite industry. While pottery first appears around 1150 BP, a fragment of a sheep bone has been accelerator dated to 1100±80 BP (OXA-873).

A date of 3550±35 BP (GRN-5888) on a shell sample (Vogel 1970), collected by Inskeep in 1964 from the standing section at Matjes River, also suggests that an

informal quartzite industry probably pre-dates 2000 BP along the Cape south coast. Three dates of between 2000 and 3000 BP were obtained from the Gordon's Bay shell midden (Van Noten 1974), the excavator observing some formal tools, although the majority are termed pebble tools, pebble flakes, choppers and chisels. This site, too, is dominated by a quartzite assemblage some 700 years before the first pastoralist groups become archaeologically visible on the coast. This pattern is repeated at Bonteberg Shelter (Maggs & Speed 1967) with macrolithic quartzite artefacts dated to between 2000 and 4000 BP.

Layers 12 to 9 at Die Kelders have been dated to 1960±85 BP (GX-1688) and 1960± 95 (Gx-1687) and are often cited in reviews of stone-age pastoralism because of their large potsherd samples. Layer 12 contains 5 scrapers and 24 backed tools but these formal tools decrease rapidly in the upper units which are dated between 1650 and 1465 BP (Schweitzer 1979:127). Domestic stock also occurs only in the upper units. Byneskranskop I is slightly inland and although it contains shellfish remains cannot really be described as a shell midden. It is therefore interesting to note that its ceramic units, dated to between 1880±50 BP (Pta-1865) and 255±50 BP (Pta-1864), have a formal toolkit amounting to 1,6%; the most common artefacts being adzes. Bone artefacts and hammerstones are common in these units, eleven sheep have been identified from the 1880 BP layer. It would appear, therefore, that the 'informal toolkit' is restricted to shell middens on the coast itself.

Smitswinkelbaai (Poggenpoel and Robertshaw 1981) contains no formal stone artefacts. This shell midden has two dates, 1175±35 BP (Pta-2200) from Layer 4 and 1420±35 BP (Pta-2198) from Layer 9. Quartzite and sandstone artefacts predominate and the excavators suggest that tools of bone and shell may have been "used to perform tasks undertaken with stone tools elsewhere" (1981:32). Pottery was recovered to bedrock and the fauna is dominated by Cape fur seal although sheep is also present to Layer 6. The authors speculate on the absence of formal tools at the site and suggest that sampling bias may have contributed to this. They also note that the large quartzite flakes are similar to those of Bonteberg (which contained formal tools) and suggest that Smitswinkelbaai may have been a specialized activity site.

The shell midden at Paternoster excavated by Robertshaw (1977) contains pottery and pre-pottery levels. Layer 1 (date obtained on shell) has been dated to 870±50 BP (Pta-1615) and 855±45 BP (Pta-1616) while Layer 5 dates to 3510±60 BP (Pta-1717). This latter date has been calibrated to 3100 BP. The percentage of formal tools in Layer 6 is 2%; in Layer 5 is 0,7%; in Layer 4 is 6,2%; in Layer 3 is 5,1%; in Layer 2 is 3,2% and Layer 1 is 2,5%. Layer 5, which is 2000 years older than Layer 1, contains fewer formal tools; i.e., formal tools do not necessarily always decrease through time. Robertshaw comments on the assemblage "The rarity of formal tools in the Paternoster assemblage is mirrored at other coastal middens in the Cape" (Robertshaw 1978:67) and he cites Klein (1974:276) who has suggested that this indicates only that formal tools may not have been particularly important in the exploitation of marine resources.

Layer 1 at Duiker Eiland has been dated (on shell) to 1700±50 BP (Pta-1581) and Layer 2 to 1930±70 BP (Pta-1554). Pottery was found only on the surface and the most common raw material in both layers was quartz. Robertshaw (1979 a) comments on the low frequencies of formal tools but notes that total artefact numbers are also very low, i.e. Layer 1 contained only 18 stone artefacts. He also dated two stone features nearby to 1970±75 BP (Pta-1707) and 2280±45 BP (Pta-1706). These dates are important because Deacon *et al.* (1978) have suggested that similar stone hearths uncovered at Boomplaas (1510±75BP) and Pearly Beach (1680±50 BP) are stone cooking platforms used by pastoralist peoples. The Duiker Eiland dates would suggest that this innovation in cooking may have preceded their arrival.

The upper three units at Tortoise Cave (Robey 1987) date to between 1680±50BP (Pta-3312) and 750±50 BP (Pta-3600) and contain 36 potsherds, sheep and small numbers of formal tools (6 adzes, 5 scrapers and 4 MRP's). Robey emphasises that the deposit from Layers 1-3 are "considerably smaller and less reliable" than those lower down. These upper layers also contain specularite and the entire midden in dominated by *Choromytilus meridionalis*. Robey suggests that there may be a short hiatus between Layer 3 and Layer 6 which is dated to 3520±60 BP (Pta-3520). The lower units (4-9) contain considerably higher frequencies of formal tools, most notably scrapers and backed pieces but few scrapers. The lithics, he concedes, show evidence of a gradual change "a process which may have been exacerbated or expedited by the introduction

of herding, but was not caused by it. This trend is in the gradual de-formalisation of the lithic assemblage, with the production of fewer flakes and blades, less formal tools and increasing use of unretouched or slightly modified flakes (MRPs) in their place" (1987:323).

The sites of KBA and KBB on the Kasteelberg kopje contain large shell midden deposits, remains of numerous sheep and Cape coastal pottery, with a formal lithic toolkit amounting to 0,2% (Smith 1990b). More recently, Smith *et al.* (1991) have described coastal sites from the western Cape with post-Wilton assemblages such as Drie Susters Main and Kreeftebaai. Other coastal sites such as Witklip and Vlaeberg Area 1-3, however, indicate that groups with Wilton toolkits continued to occupy the same region during this period. There would appear to be evidence for two contemporary cultural groupings occupying the western Cape coast during the last 2000 years, a scenario which also occurred in the pre-2000 period in the south-eastern Cape. The data discussed above demonstrate a trend toward fewer formal artefacts and a less standard toolkit which, I submit, emerged along the Cape south coast some 3000 years ago. This macrolithic/informal industry gradually spread along the coast into the western Cape where its earliest expression dates to approximately 2000 BP.

The only interior site which exhibits an assemblage totally lacking in formal tools is Scott's Cave. It is a site which has been generally ignored in pastoralist studies, despite its containing many elements which could be ascribed to pastoralist activities. It has a basal date of 1190$\pm$100 BP (SR-82) and a date of 360 BP (Y-1425) some 3 inches from the surface (Deacon & Deacon 1963). The lithic assemblage consists of many short, thick, quarztite flakes and there are no formal tools in the sample. The pottery sample is extremely large, representing some 36 pots. Decoration, lugs and bosses confirm that it may be classified as Cape coastal ware. Klein and Scott (1975) identified sheep from layers 2 and 5 and there is tentative evidence for cattle. Portions of a wooden bow-stave and the fauna support the continued importance of hunting, while well-preserved plant remains indicate that plant foods were also important. All this material has accumulated in a small cave some 40 km from the coast. The informal assemblage clearly links this site to the post-Wilton, but it is nevertheless the only such site in the interior of the country. Although Deacon (1984) refers to Doornfontein in the northern Cape as

another such example, it is in fact a prehistoric mine and the small number of formal tools is not really surprising.

Wilson (1990), having rejected the interpretation of these assemblages as the material expressions of different populations, falls back on a functional model. Harvesting and preparing shellfish do not reqire formal artefacts, ergo, they are not manufactured at the coast. I believe that attempts to explain the informal (post-Wilton) assemblages from a functional perspective obscure the trajectory of change which I have briefly delineated above. It lies outside the scope of this thesis, however, to attempt to isolate the conditions responsible for the gradual decrease in the manufacture of formal stone artefacts during the last 3000 years. I believe the process to have been accelerated (but certainly not precipitated) by the introduction of pastoralism.

APPENDIX 3: HISTORY OF THE LITTLE NAMAQUA

This section amplifies the short historical insert on the Little Namaqua provided at the beginning of chapter 2.

Between 1661 and 1685 the Dutch launched seven expeditions into Namaqualand in search of the source of the copper reputedly mined by the Namaqua. These early accounts are of variable quality. It is not always clear where Namaqua kraals were encountered and there is only one descriptions of the layout of a kraal (see below). References dating to 1661 of warfare between the Namaqua and Oedasoa of the Saldanhars (Cochoqua) clearly belie claims of Namaqua isolation. They, it would appear, were as much part of the Khoekhoen political arena as any other group. If there is any accuracy in these early reports it would appear that the Namaqua were very rich and widely feared.

The most comprehensive description of a Namaqua settlement also dates to this year. Meerhoff reported on a kraal encountered near the Olifants River, that it was like those of the Cape Khoekhoen. It consisted of 73 huts in a circle, with three huts on the outside belonging to their "messengers" who owned no cattle. The huts were reportedly occupied by 700 people, i.e., ten people per hut, which I have indicated previously (Webley 1984) appear too high by ethnographic accounts. In addition, this group owned about 4000 cattle and 300 sheep as well as goats (although possibly in very small numbers), which were all kraaled inside the circle of huts. Meerhoff describes their dress, utensils and weapons, too. This information is presented in chapter 3.

Namaqua kraals of 83, 53 and 11 huts were encountered by Cruijthoff (Godee-Molsbergen 1921) in 1662 to the north of the Olifants River, while further afield another 5, 16 and 75 huts were discovered. At this stage the Namaqua were involved in attacking a tribe they called the "Numakwe". Soon after turning back, four of Cruijthoff's men were wounded by a shower of assagays; he suspected a nearby kraal of souquas had been responsible.

In 1663 Jonas de la Guerre (Godee-Molsbergen 1921) found kraals in the same area as that described by Cruijthoff and he refers to a high mountain which is possibly the Kamiesberg. Here he encountered a kraal of 28 huts while a little distance away the chief of the Little Namaquas lived in a kraal of 80 huts. When Olof Bergh set off for Namaqualand in 1682 in search of the source of the copper deposits he encountered the main body of the Namaquas near the present town of Garies. He was told that "the Amaquas were not prepared to come and barter with us here because they were carrying on warfare" (Mossop 1931:117). On his second journey in 1683 Bergh made the first of what was to be many observations on seasonal movements by the Namaqua. On his way to the old camp near the present town of Garies on the 1st of October 1683, he "saw that the people of the kraal were leaving for the mountains and going towards the east side with all their cattle" (Mossop 1931:167).

The most substantial seventeenth century accounts of Namaqualand are those of Simon van der Stel who eventually reached the "Koperberge" near the present town of Springbok and was able to mine sufficient ore to convince the Dutch that it was indeed worthy of further investigation. He found the first Namaqua kraals north of the Doornboschrivier, which is a reference to the Groen Rivier. In addition to the Namaquas, his expedition also encountered a party of Sonquas or Obiquas north of the Berg River (Waterhouse 1932:117), his Hottentot servants informing him that they "are just the same as the poor of Europe, each tribe of Hottentots having some of them and employing them to bring news of the approach of a strange tribe" (Waterhouse 1932:122).

Just north of Bakkeleij Plaats (Vredendal), they came upon a Sonqua of the Amaquas, one of apparently twenty altogether. Their weapons consisted of arrows, bow and assegai. The Sonquas, Van der Stel later reports, "were all lean and slight of frame, due to the great hunger and hardship which they endure. They eat nothing but the bulbs of flowers which they [we?] call *uyentjes*, tortoises, and a certain large kind of caterpillar; together with locusts, which are found here in abundance". (Waterhouse 1932:128, Waterhouse's interpolation). From the descriptions of the mountains nearby, it would appear that they were encountered very close to the lower slopes of the

Kamiesberg, namely near the present town of Garies. Soon afterward the Sonquas' women and children joined the expedition, suggesting that they were living nearby.

On ascending the mountains the Sonquas informed him that there were several Amaqua kraals nearby. (N.B. Nienaber (1989) is of the opinion that the Amaquas formed a separate tribe from the Namaquas, but both terms are used interchangeably by early travellers until 1780 when no more mention is made of the Amaqua.) Van der Stel was visited by the son of Chief Nonce whose kraal lay nearby; he reported that the kraals of five other chiefs lay together further inland. The ensuing account of how van der Stel mistreated the chief, his son and others, taking them hostage and extracting livestock by threats and deception, sets the scene for future acts of alienation. The five other chiefs are later introduced as Oedesson, Harramoe, Otwa, Haby and Ace. From the manner in which they resolved the issue of Jonker's (Nonce's son) 'insubordination', it would appear that these chiefs were all of equal rank.

Travelling further, they passed, it would appear, the present town of Kharkams, where they came upon "three kraals on the other side of the river" (1932:133). Of the Amaquas, van der Stel, remarks that they had "a certain kind of gum, obtained from trees, also some glittering sand, which was judged to be of mineral character" (1932:133). The gum is probably that of the *Acacia karoo*, while it is possible that the glittering sand is specularite. The latter, they claimed, they obtained from the Orange River. While in this area, the Amaquas honoured the Commander with reed dances on the celebration of his birthday. It was to be the first of many reed dance observed by travellers to Namaqualand.

After spending several days testing the quality of the copper at the Koperberge, van der Stel turned back to Cape Town. On reaching the Buffels River he decided to travel along the river bed to the sea, a decision which plainly caused his Amaqua guides great uneasiness. Some of his men who went ahead saw five Sonquas along the shore and they captured one to show them the way. Further inland along the river they "found the traces of a small kraal belonging to the same tribe as the above-mentioned Sonquas" (1932:147). While at the coast, van der Stel also observed a natural phenomenon, namely redtide, during the month of December. "With this change of wind the sea next

day appeared quite red for fully a musket-shot from the shore, the reason being altogether unknown to us" (Waterhouse 1932:148). In the meanwhile, the Commander is said to have interrogated the Sonqua, who claimed that he was not a Sonqua but one of the tribe called Kamesons, who generally live along the Eyn (Orange River). Earlier, van der Stel had remarked that they had found in the Amaqua kraals several of the Hottentots called Kamesons, who live by the Orange River. This is clear evidence, therefore, for extensive movements among Khoekhoen groups throughout the northern Cape region well before European influence could be held responsible for their interaction and possible collaboration against the Dutch.

Valentyn (1973:14) reported that the Dutch settlement at the Cape was visited by Namquas in 1705 and three captains were officially installed; namely Plato, Jason and Vulcan. Penn (1987:464) avers that by 1705 the Khoikhoi population in the western Cape had been affected to such a degree by the open cattle trade that Starrenberg found only two kraals between the Berg River and Klawer. Very few had any cattle; indeed, Starrenberg observed that they had "nearly all become Bushmen, hunters and brigands, dispersed between and in the mountains" (Starrenberg in Penn 1987:464).

In October 1712 a trekboer started a rumour that the Great Namaqua were congregating on the Orange River to attack the colony. He, with three Khoekhoen, had journeyed to the Little Namaqua before winter to barter for elphant tusks. "Whilst there he had stolen five heifers from the San of the Little Namaqua and now in the dry season, feared that the Little Namaqua would seek revenge by crossing the Olifants River and stealing his cattle" (Penn 1987:469). The previous year, the Little Namaqua are reported to have "suffered from some hostile acts between themselves and their bushmen, and had taken away the cattle of the latter" (Slotsboo quoted in Penn 1987:469). The Dutch use of the possessive pronoun, "haare Bossiesmans" is interesting, says Penn. Clearly, the conflict between the Little Namaqua and their San was resolved by the time of the raid and that, by robbing the San, the trekboer was committing a hostile act against the Little Namaqua. There is also further evidence that the San of the Sandveld and the Olifants River were clients of the Little Namaqua. Penn suggests that they had been given or loaned livestock by the Namaqua in return for the symbolic payment of tribute or military service.

Rhenius (Mossop 1947), travelling to Namaqualand in 1724, recorded the devastation wreaked by the smallpox epidemic among the local people. Livestock numbers had also decreased considerably, although it is not clear if this was due to trade with the Dutch, or, as they reported to Rhenius, due to internal warfare among themselves. On arriving at the Groen Rivier he was informed that the Amaquas lay dispersed among the high mountains and it was not possible to visit them with wagons. For two successive years, they declared, the Dutch had cleared them out of all their cattle. Furthermore, "the Bushmen had carried off one of their cattle-kraals and therefore they were in no condition to trade with us" (1947:141). In 1738 an illegal expedition to Namaqualand and the Orange River area, spearheaded by ten colonists and some Khoisan servants, stole cattle from both the Little and Great Namaqua. Plato, Vulcanus and Arisie complained of this to the authorities at the Cape; of the over one thousand cattle stolen from the Little and Great Namaqua during this expedition, only 279 were recovered (Penn 1987:478).

Later in 1738 a farmer called Lourens complained to the Landdrost in Stellenbosch that his cattle had been stolen by "der bosjemans wonende omtrent de kleyne namaquas" (Penn 1987:477). In 1739 the Council of Policy received news that a ship had been wrecked on the Namaqualand coast and that there were survivors. A rescue expedition was launched with the observation that it would entail no extra expense as one of its objectives would be "the usual cattle barter with the Hottentots in the neighbourhood" (Penn 1987:486). An expedition led by Gibbelaas reached what appears to have been the Buffels River, where they encountered three Griquas and two "beach bushmen". They knew nothing of the wreck, claiming that it was a pack of lies, fabricated by a certain Swartbooi to provide him with a pretext for attacking a kraal of "beach bushmen" and taking their cattle. These "beach bushmen" evidently herded livestock but we can merely speculate on their identities; whether Soaqua or Kamesons or Namaqua. Gibbelaas was unable to find any evidence of the shipwreck and returned to Cape Town.

The next description of the Namaqualand region dates to 1761 when Hop travelled through it to Great Namaqualand (Namibia). Two months before he set out, the grazing on "Uitkomst below the Cammiesberg" was granted to the son of Hendrik Beuke(r). It

appears from the records of loan farms that numerous tracts of land around and in the Kamiesberg were portioned out to trekboers between 1760 and 1780. Hop encountered his first Namaqua kraal at Klipvalley (possibly between Garies and Kamieskroon), where several Namaquas from small kraals nearby, came to visit him. According to Hop, the land between the Groen River and the Orange River formed the land of the Little Namaqua. "The aforesaid Little Namaqua who inhabit this land are of a nature most lazy and timorous - owning few cattle they live in great poverty, but notwithstanding this, are continually harassed by the Bosjemans who would rob them both of life and stock" (Mossop 1947:29). At least one hundred Little Namaqua (men, women and children) requested Hop that they be allowed to accompany him "to visit their friends among the Great Namaquas". They would not travel on their own through northern Namaqualand, because they feared attack by the Bosjesmans.

The historical accounts cited above appear to document a period of rapidly changing relations between the Namaqua and the Soaqua/Bosjesmans. During the seventeenth century these two groups, from what we can gather from limited information, lived interspersed among each other, although the Namaqua seem to have been concentrated in the mountains while the Soaqua lived in the plains. During the early eighteenth century a form of symbiotic relationship appears to have developed between them, with the San taking care of the Namaqua stock and receiving their protection in return. By the end of the eighteenth century the dramatic reduction in Namaqua livestock and increasing pressure exerted by the northward moving trekboers precipitated a conflict of interests and fierce competition. Bosjesmans no longer needed Namaqua protection, in fact the Namaqua now needed protection against the Bosjesmans.

In 1772 Acting Governor Plettenberg wrote to the Landdrost at Stellenbosch, revoking the grant of two loan farms to two trekboers and instructing that they be returned to the Hottentot Captain Wildschut and his kraal. One of the farms mentioned is Lely Fonteyn, today the centre of the Leliefontein Reserve. One of the farmers concerned, Hermanus Engelbrecht, subsequently came to an agreement with Wildschut, ceding his farm Uitkomst (between the Buffalo and Groen Rivers) to Wildschut in exchange for the right to depasture his livestock on the farm Lely Fonteyn.

In 1777 Plettenberg (Moodie 1960 111:72) again wrote to the Landdrost in Stellenbosch, this time to request him to investigate charges laid by two Namaqua chiefs, namely Wildschut and Grootvogel, concerning the "depradations committed upon them by the Bosjesman Hottentots, and in particular that they had been incited to these proceedings by the Bastard Adam Boer".

The year 1779 saw at least three descriptions of the region to the north of the Olifants River, namely those of Wikar (Mossop 1935), Paterson (Forbes & Rourke 1980) and Gordon (Raper & Boucher 1988). Although much has been made of their accounts, it is clear from the foregoing discussions that the lifestyle of the Little Namaqua had been radically altered by this time. According to Elphick & Giliomee (1979), more than half of the Namaqua Khoekhoen population perished as a result of the smallpox epidemics which swept the region in 1722-24 and again in 1750 and 1780. Many of those who survived moved north across the Orange River to join their friends and relatives in Great Namaqualand. Those who remained south of the Orange River tended to concentrate in the Kamiesberg mountains, the prey of the Bosjesmans who were continually raiding their stock. Wikar had little to say regarding the Little Namaqua and is not considered here, while Paterson will be referred to only when his comments amplify those of Gordon. The value of Gordon's observations lies not only in his written material but also in his illustrations of both Khoekhoen and hunter-gatherer settlements and clothing. On top of the Kamiesberg he arrived at the village of Chief Wildschut (Noebee) at a place called Lange Clip (the editors suggest it was situated between present-day Garies and Kamieskroon). The village "consisted of nine straw or rather mat huts, and of about fifty men, women and children" (Raper & Boucher 1988:252). In addition, there were two women from Great Namaqualand who had apparently married men of Wildschut's kraal. On enquiry, Gordon ascertained that there were four other chiefs apart from Wildschut and that the entire nation consisted of four hundred men, women and children. Furthermore, they claimed that the Amaquas and the Namaquas were one and the same people, a claim disputed by Nienaber (1989). It is possible that these five kraals did not constitute the sum total of Khoekhoen people in Namaqualand and that other Namaqua kraals may have existed around the Springbok/Steinkopf area as well as on the southern banks of the Orange River (Richtersveld area), although neither Gordon or Wikar mentions this. From the

Kamiesberg, Gordon and Paterson travelled in a north-westerly direction to cross the Buffalo River close to where it enters the Atlantic Ocean. They found numerous shell-middens along this stretch of coastline and Gordon remarked that he had heard that "beach-Hottentots lived here, who fed themselves on whale meat and shellfish" (Raper & Boucher 1988:256). Further north along the shore he came across "sticks set up and weighted with stones, in which the wild Bushmen catch jackal" (Raper & Boucher 1988:257). Crossing the Buffalo River he found the remains of a dead elephant, shot he claims, by a Bastard Hottentot. North of the Buffalo River he and Patterson found "seven huts standing together which the wild Bushmen had made of whale bones, all protected towards the NW. At these huts were large amounts of the shells mentioned above" (Raper & Boucher 1988:258). The shells were all of a particular type, but were not mussels although they were abundant, he continues.

An hour's journey to the north of the Orange River they came upon a small settlement which has been discussed at length by Wilson (1990), and will therefore not be repeated here. Suffice to say that the inhabitants had no livestock but that there was evidence of hunting dassie, jackal, eland and seals, the scavenging of whale meat, the collection of ostrich eggs, 'canna', 'buchu'and shellfish, probably *Patella* sp. from the illustration (Raper & Boucher 1988 Plate 52). They had a dog, an earthenware pot, bows and arrows as well as assegais some eight feet in length. In the illustration of the settlement which accompanies the text, two containers are depicted hanging from a forked branch outside on of the huts (Raper & Boucher 1988 Plate 52). The shape of the containers suggests that they may be the wooden bambus rather than earthern pots. They lived in two huts quite unlike those of the Hottentots, the second, it appears from the description, having an attached shelter. In the translation Raper & Boucher called them 'wild Bushmen', although Wilson (1990) points out that the original term was 'wilden'. Wilson, reviewing Gordon and Paterson's description, conludes that they were hunter-gatherers exploiting both marine and terrestrial resources. This is correct insofar as the economy of the people is concerned; however, there are a number of pointers which strongly suggest that they were culturally Khoekhoen dispossessed of their stock. Firstly, Gordon says they spoke a Hottentot dialect, while Paterson (1980) repeatedly calls them Hottentots. One of their wives had been born in 'Little Namacqua Land'; although the editors, in the footnote, assume that she was not a Little Namaqua she may

equally well have been. Two of the women had the small finger of their left hand amputated, a custom prevalent among both the Khoekhoen and hunter-gatherer groups; however, in this case it had been undertaken as part of the "canie" or 'making different ceremony' characteristic of the Namaqua (see Gordon's description of this ceremony while among the Namaqua of the Kamiesberg). The chief had the same name as that of his mother, namely Koet. This is extremely important, as I have shown that this system of cross-descent naming was still characteristic of the Namaqua in the early 20th century. Finally, they called their fire-sticks "coeroep", which Gordon remarks is "almost the same as the white firestone is called" (Raper & Boucher 1988:273). White quartz is still called 'koeroe' or 'vuurklippe'in the Richtersveld today (Webley 1990) and, in my opinion, Gordon's "coeroep" may be equated with the Nama //guru, providing further proof that the 'wild Bushmen' living to the north of the Orange River were in fact impoverished Namaqua.

Gordon's travels across Bushmanland to the Orange River provides fascinating descriptions of the inhabitants of this region. As with the observations of Wikar before him, one is struck by the enormous diversity of peoples living in the area and the complex intermeshing of economies. The Einiqua, or river people, included the Namnykoa, Kaukoa and the Aukokoa. They lived on islands in the river and owned large herds of sheep and cattle. Hunter-gatherers or Bosjesmans lived among the Einiqua and there was considerable intermarriage, the term Einiqua often including Bosjesmans. Sixty years later, the Einiqua had disappeared from the Orange River area; either moving across the river to join the Great Namaqua or becoming absorbed in Korana and Tswana groups. Further down the river Gordon encountered the Coraqua (Korana), while the Briqua (Tswana) lived across the river. Everywhere there were Bosjesmans groups interspersed among them, some hunter-gatherers, others herding and still others in various types of client relationships. Some of these Bushmen spoke the 'Chinese' dialect, like that of the San near the Sneeuberg. On his return to the Kamiesberg, Gordon again visited Wildschut and his people. His illustration of the chief and several other members of the group is discussed in the section on dress in chapter 3.

The Namaqua of the Kamiesberg continued to be assimilated into the broader political milieu developing in the Cape. The founders of the Griqua nation, Adam Kok and his son Cornelius Kok, for example, both owned farms in the Kamiesberg. Cornelius owned at least five farms and lived in the Kamiesberg during the 1790s before moving into Bushmanland.

Barrow (1806) visiting the Kamiesberg in 1799, lamented the dramatic decrease in Namaqua numbers and attacked the Dutch peasantry as being reponsible. The Namaqua consisted of four 'hordes' still concentrated in the Kamiesberg, the area between the mountains and the sea, he remarked, being virtually uninhabited. The reason for this, countered Lichtenstein (1928,1930), was that many Little Namaqua had joined mission institutions in Bushmanland some ten years previously to escape the drought. According to Barrow, the Namaqua were still moving seasonally between the mountains and the plains to escape the extreme winter weather. The Reverend B. Shaw (1834), persuaded by Chief Wildschut to establish a mission at Leliefontein in 1816, witnessed and was party to, the final decline of the Namaqua people. A once powerful and wealthy nation was finally persuaded to take up agriculture, construct permanent houses, and transfer the authority of the chief to the missionary. The farm granted to Wildschut in 1772 and the mission of Leliefontein formed the core of the Leliefontein Communal Reserve established in 1854. The reserves of Komaggas, Concordia, Steinkopf and Richtersveld were granted 'tickets of occupation' toward the end of the nineteenth century.

Very little information is available on the history of the Richtersveld reserve. Alexander (1838) found a settlement of 20 huts inhabited by approximately 200 people, near Arriesdrift. According to Carstens (1966) and Hoernle (1923), the Richtersveld was inhabited by hunter-gatherer groups as well as a Nama clan called Swartbooi, under Captain Paul Links. The Nama are reported to have gradually expelled the San from the region. Bastards from the "Harteveldt" settled in the region at the beginning of the last century and in 1830, a Bastard married into a Nama clan and became Captain. Again, in the 1940s a group of so-called "Bosluis Basters" settled in the southern area of the Richtersveld around Eksteenfontein and Lekkersing. A Rhenish mission was first established at Khubus in the 1850s confirming that the region remained relatively isolated in terms of European influence until fairly recently. Today the reserves are

inhabited by descendants of the Namaqua, although many other groups also settled in them during the nineteenth century, as mentioned above. For example, of the 268 families registered in the Leliefontein Reserve in 1854, some 37 were designated Baster, six were emancipated slaves and one was an Afrikaner. Steinkopf is also reputed to have become the home of many Baster peoples.